



Cleaning up our Rivers, Lakes and Seas – the Answers.

#CleanUpRivers

Please have the blog open.

Welcome.

Prof Becky Malby, Ilkley Clean River Group

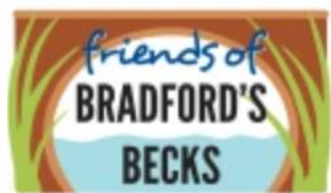


Cleaner Nidd, Fit for Life



Shropshire Bathing Waters

River Yealm water Quality Group



River Wenning Group



<https://cleanriverslakesseas.blog/>



The Context - pollution

01

3.5 Million hours of sewage pollution, 1,271 discharges a day

02

All rivers polluted only 16% good ecological and zero good chemical status. All our chalk streams are in poor health.

03

Target for good is 40 years away



The Context – public outcry



Public outrage and mass organisation at grassroots uncovering the problem locally.



MPs elected on the sewage ticket.



We thought we had paid!



Anger at the profiteering from pollution



The Context – what is legal i.e. exceptional circumstances?

EA - at the capacity of the sewage works

Ofwat – 20 unless EA says water quality can tolerate more

Defra Bathing Status – 10

Wild Fish Judicial review. Exceptional weather does not include normal or usual rainfall. It certainly does not include dry weather conditions

Context- the regulation

- Every Water Company under criminal investigation for illegal pollution (Ofwat) and many for breaching permits (EA)
- OEP says regulators not regulating to the law
- By 2050 short of 4 bn Ltrs of water per day, currently leakage is circa 3bn a day, not on track for 2050 targets.(Dame Julia King, Watershed investigations)

Major investigation as water companies admit 'unpermitted sewage' may have been dumped in rivers

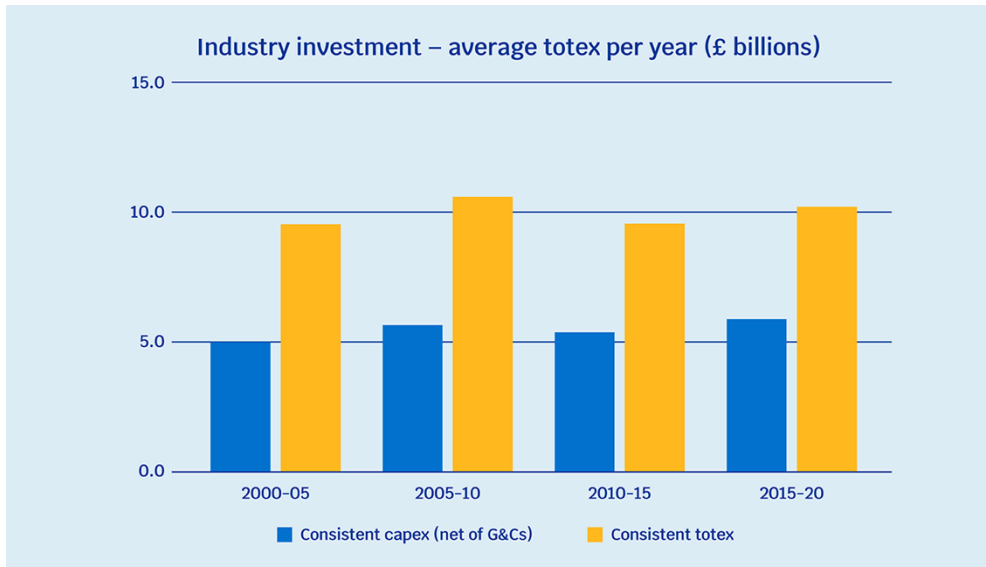
Firms found guilty could be fined up to 10 per cent of annual turnover or prosecuted

Matt Mathers • Thursday 18 November 2021 17:35 GMT • 19 Comments



The government-run Environment Agency and water regulator Ofwat announced the investigation on Wednesday (istock)

The Context – the money



<https://www.ofwat.gov.uk/investment-in-the-water-industry/>

- 60Bn debt, 78Bn dividends...and then there are the land sales.
- Price rises set to increase by circa 36% (Yorkshire Water) but up to 44% (Southern Water) before inflation, to pay for 'enhancement'.
- Despite financial distress Thames Water is not in special administration.
- Re-nationalisation costs are disputed 90Bn (water companies social market foundation) or 14.5Bn (Moody's, the international credit agency).
- Who has invested? David Hall says, 'less than nothing'. Is it customers who have really invested and what is our return?
- Noone knows what the actual costs are to fix the pollution.

The Context – local action

The public has had to make the problem visible and be savvy in using policy and legislation to secure regulatory and water company attention.

Masses of citizen science water testing making the problem visible.

Applications for bathing status stalled so new citizen designation.

Requires real collaboration between the public, the regulators and the water company at a local level.



The Context – Government Fear

New Legislation means the public can pay. But previously Ofwat says shareholders should pay. Why loosed the legislation?

Special Administration means open book and reshaping, water companies can be moved into NFP, Public or back to corporate ownership – were Is the public stake?

But gov already written off public and NFP ownership

why change the law to make it a pubic liability?

Because of the 'chilling effect' on UK's appeal to International Investors....(Guardian 30th August)

GROWTH at all costs - Treasury?



Baroness Hayman of Ullock

The Parliamentary Under-Secretary of State for Environment, Food and Rural Affairs

We have no plans to nationalise Thames Water or other water companies so are not considering alternative calculations on renationalisation. We continue to carefully monitor the situation at Thames Water. The Government is also focused on tackling the public's immediate concerns to clean up the nation's polluted waterways and turn around the sector's performance.

What We Want

A Clean River Wharfe

How Do We Get It?

Enforce The Law!



For more information go to
ilkleycleanriver.uk or scan the QR
code below



The Answers need to address:



THE LAW: Clarifying guidelines.



DESIGN: Technically what is needed in a combined sewage system.



MONITORING & ENFORCEMENT: How do we know if we have clean water for rivers, lakes and seas. What counts as clean?



COST: What is the actual cost and to who.



SYSTEM: How do we get a secure, safe, sustainable water system - what ownership and financing model do we need, and how does the public have a real stake and say.

Programme

12.35 What do we know about Water Quality?

13.20 Community Song: Dirty Water.

13.30 Getting our rivers cleaned up – a successful campaign

14.00 Campaigning for Change

15.30 Question Time

16.00 What Now – how do we mobilise together to secure clean rivers lakes and seas?

16.30 Chatting!

17.15 We need to be out of here...

Session 1

What do we know about Water Quality?

Chair: Di Lury, Ilkley Clean River Group

Prof Rick Battarbee – organic matter and nutrients



Worries about water: a very brief introduction to faecal bacteria, organic matter and nutrients

Rick Battarbee

Addingham Environment Group & Ilkley Clean River Group
University College London



Ilkley, 22nd September 2024



Water quality: pollutants

1. Legacy pollutants: known effects

- Metal mining (toxicity)
- Sulphur and nitrogen deposition (acidity, fish, food web)

2. Continuing pollutants: known effects

- **Faecal bacteria** contamination (human health)
- **Organic matter** pollution (oxygen, food web)
- **Nutrient pollution** (algal growth, food web)

3. Emerging pollutants: uncertain effects

- Human and veterinary pharmaceuticals including antibiotics
- Home and personal care products (cosmetics, shampoos)
- Synthetic hormones, contraceptive pills and HRT
- Anti-microbial resistance (AMR) propagation
- Microplastics
- Highway runoff (nutrients, metals, hydrocarbons)

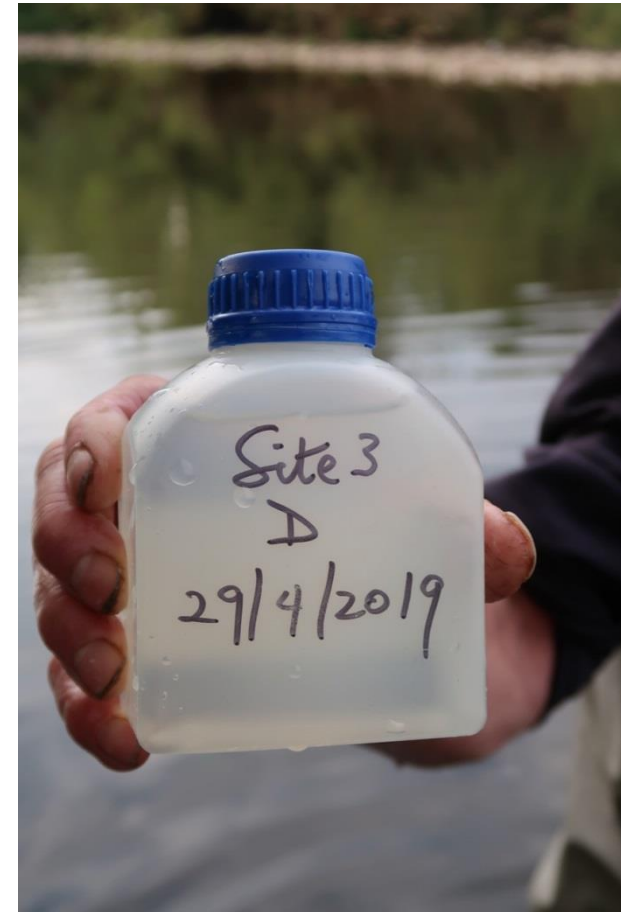
Storm overflow in the Wharfe: extremely unsightly, releases **organic matter**, **nutrients**, **faecal bacteria** and many other pollutants



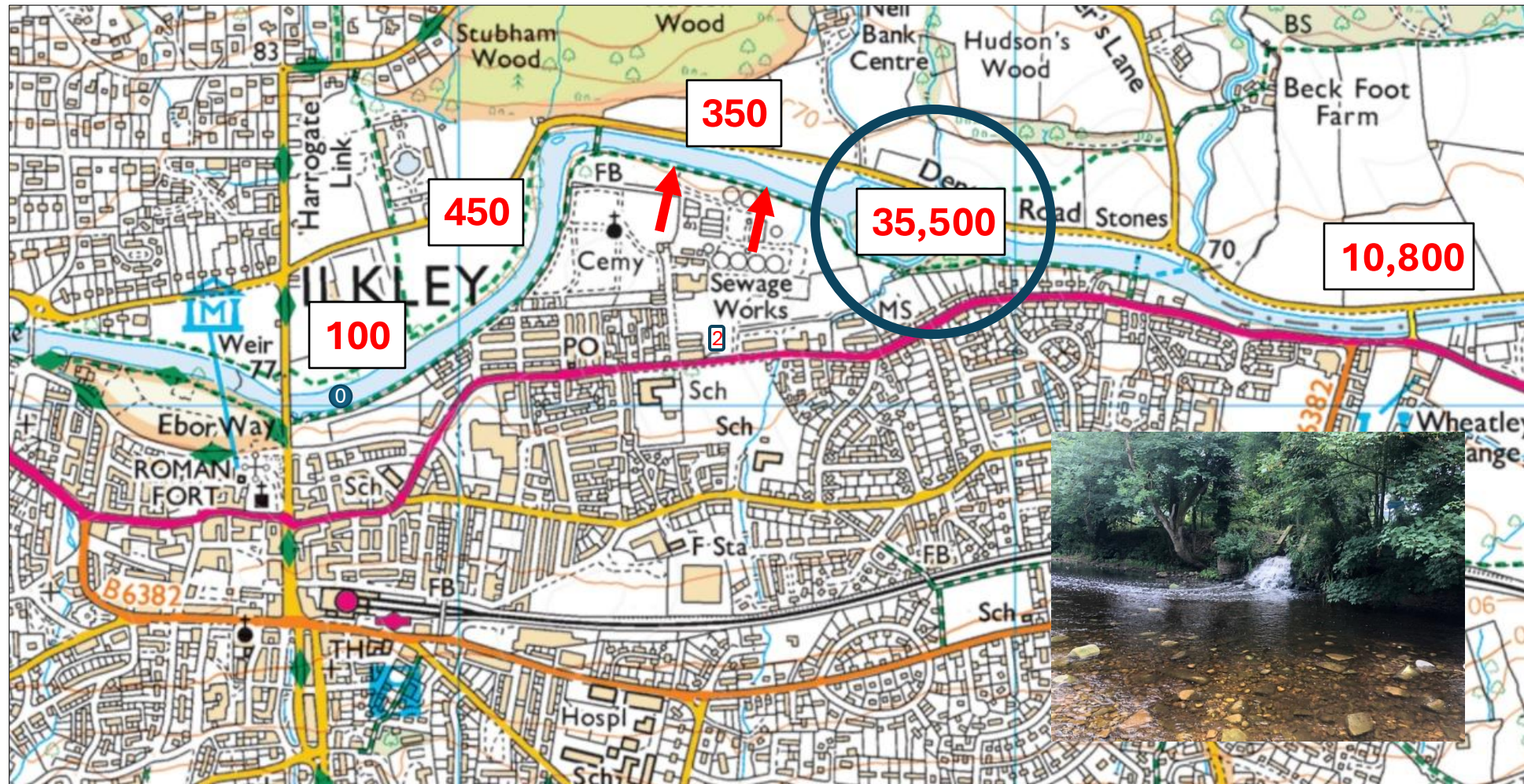
Concern for the impact of untreated sewage on water quality and the health of swimmers gave rise to the creation of the **Ilkley Clean River Group** in 2018



One outcome was a **citizen science project** to monitor *E. coli* numbers upstream and downstream of the sewage works to assess the health risk to swimmers

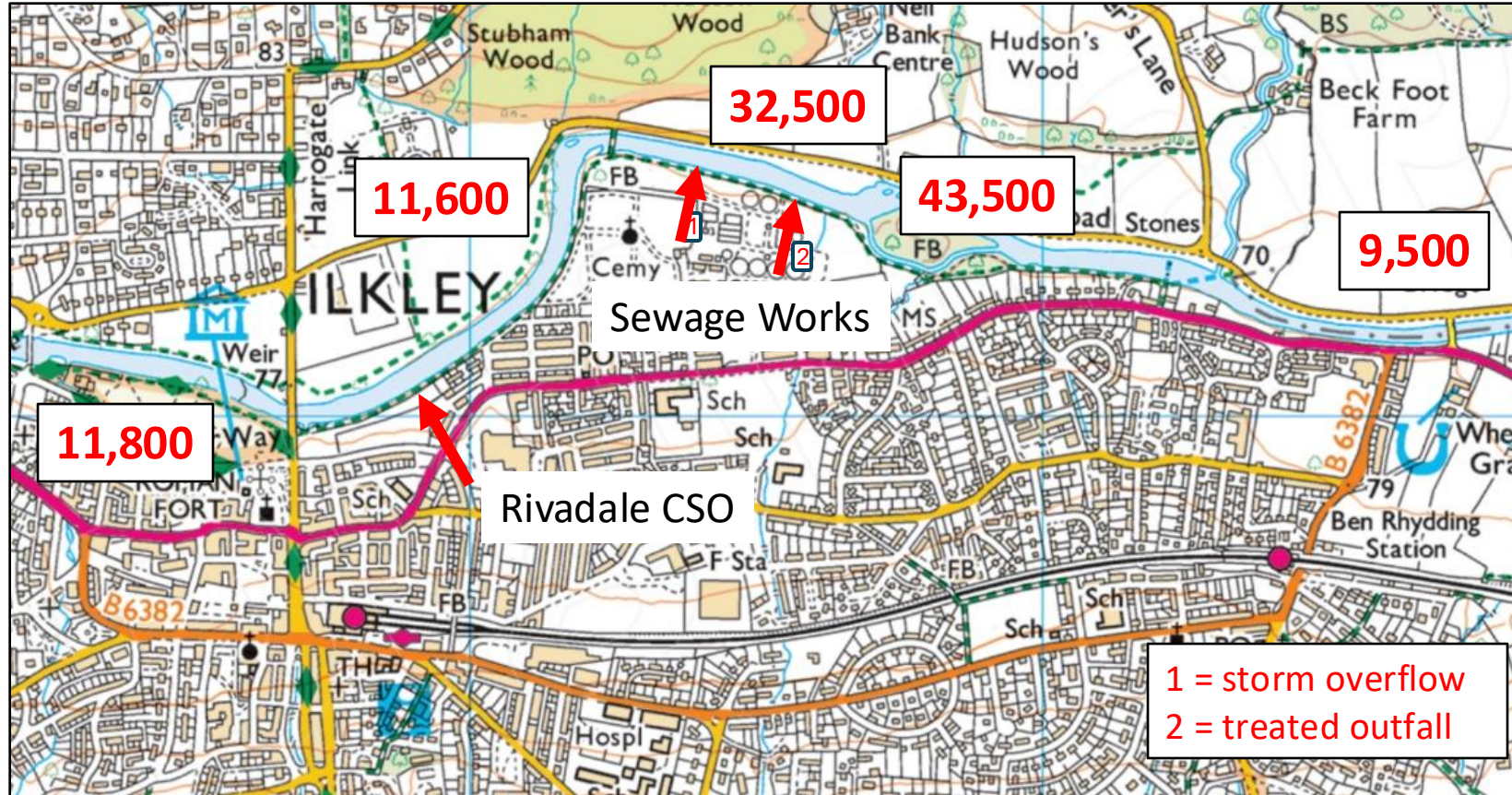


In **dry weather**, low flow, conditions when no untreated sewage was being discharged *E. coli* concentration was **very high** immediately downstream of the “treated” effluent outfall



Ilkley Wharfe: *E. coli* (cfu/100 ml) during **low flow** (10th July 2019)

In **wet weather**, high flow conditions *E. coli* concentrations are **very high at all sites**, both upstream and downstream of the sewage works, and between the storm overflow and treated outfall



Ilkley Wharfe: *E. coli* (cfu/100 ml) during **high flow** and **a spill** (13th June 2019)

We know that the **storm overflow tanks** at the Addingham Pumping Station three km upstream frequently spill and contribute significantly to the *E. coli* concentration in the river in wet weather

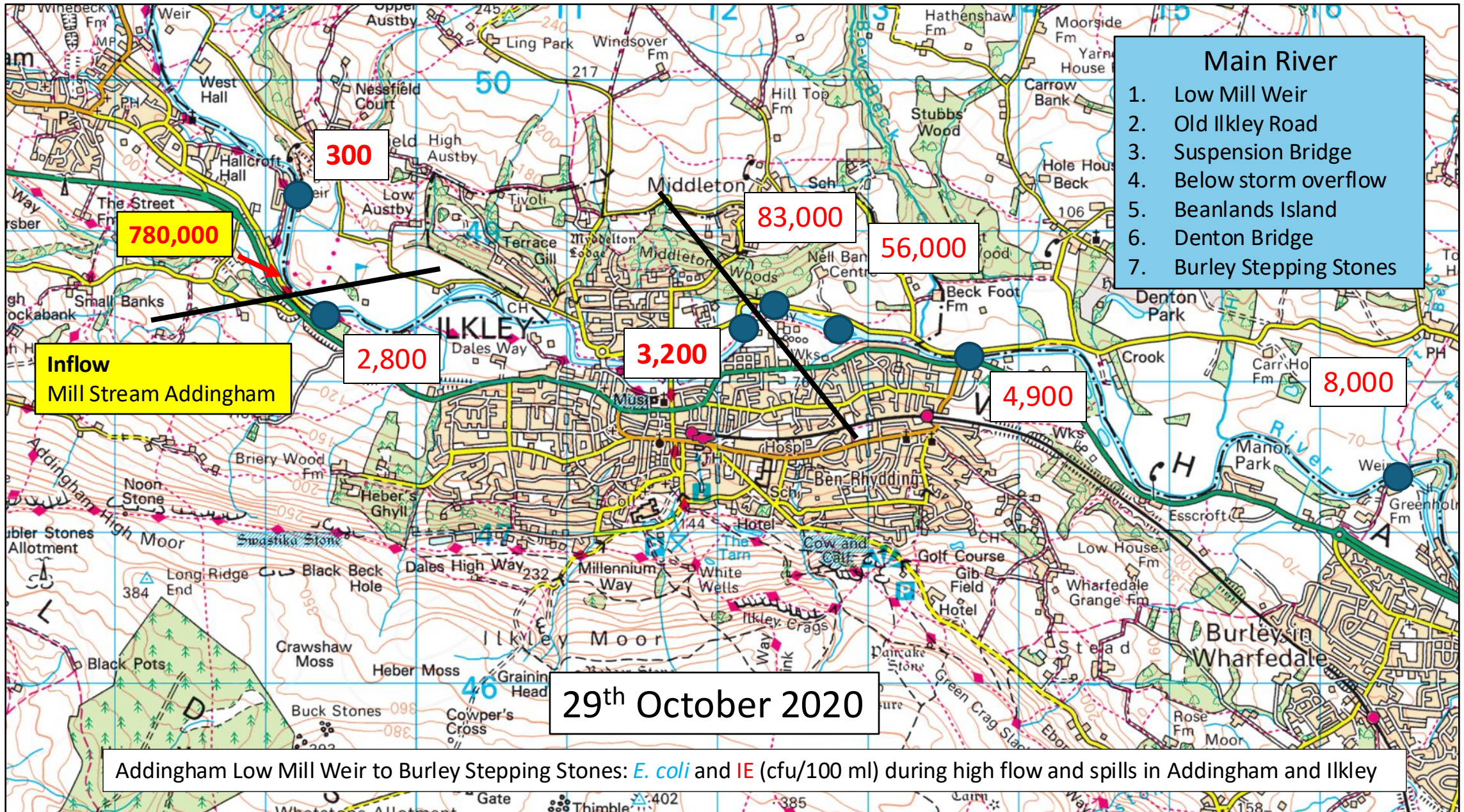


November 2019



Pictures from Steve Fairbourn

The sewage Pumping Station in Addingham spills in wet weather



However, we also know that concentrations are **high after rainfall when untreated spills are not occurring**. In these conditions **agricultural livestock** are the primary source of *E. coli*



Photo: Jonathan White

River Wharfe: Bolton Abbey

Evidence for an agricultural source is provided by data from **small tributary becks**, sampled on 23rd August, 2021, a day after prolonged rainfall. DNA analysis by Sheffield University showed the sample from the bathing water site on this day was dominated by **faecal bacteria from ruminants**



Town Beck, Addingham

Livestock, septic tanks, surface runoff?



Hambleton Beck, Bolton Abbey

STW, livestock, septic tanks?



Lumb Beck, Addingham

Livestock, septic tanks,
private STW?

Faecal bacteria and human health

- **Faecal bacteria** populations and **associated pathogens** occur in almost **all surface waters** throughout the UK (and much of North-west Europe) and are **highest in wet weather**
- They are derived from **sewage effluents, both untreated (storm overflows) and treated (final effluent)**, from agricultural livestock and from urban surfaces
- Their relative importance depends on **time, space and weather** conditions

Organic matter, nutrients and ecological health

- Faecal pathogens are a problem for humans using the water but **not for wildlife** (ecology)
- Fish and other aquatic animals are stressed by a **reduction in oxygen concentration** when **organic matter** (untreated sewage, livestock slurry) enters the water, and
- The overall ecological status of rivers and lakes is threatened by nutrient pollution when **phosphorus and nitrogen** concentrations (from sewage and agricultural fertilisers) increase, causing excessive algal growth and consequent food-web disruption). This is called “eutrophication”
- It can also be a threat to human health when and where blue-green algae (**cyanobacteria**) blooms containing toxins occur

In upland rivers in the UK, such as the Wharfe, nutrient pollution is expressed by the prolific growth of **filamentous algae** on stones on the bed of the river

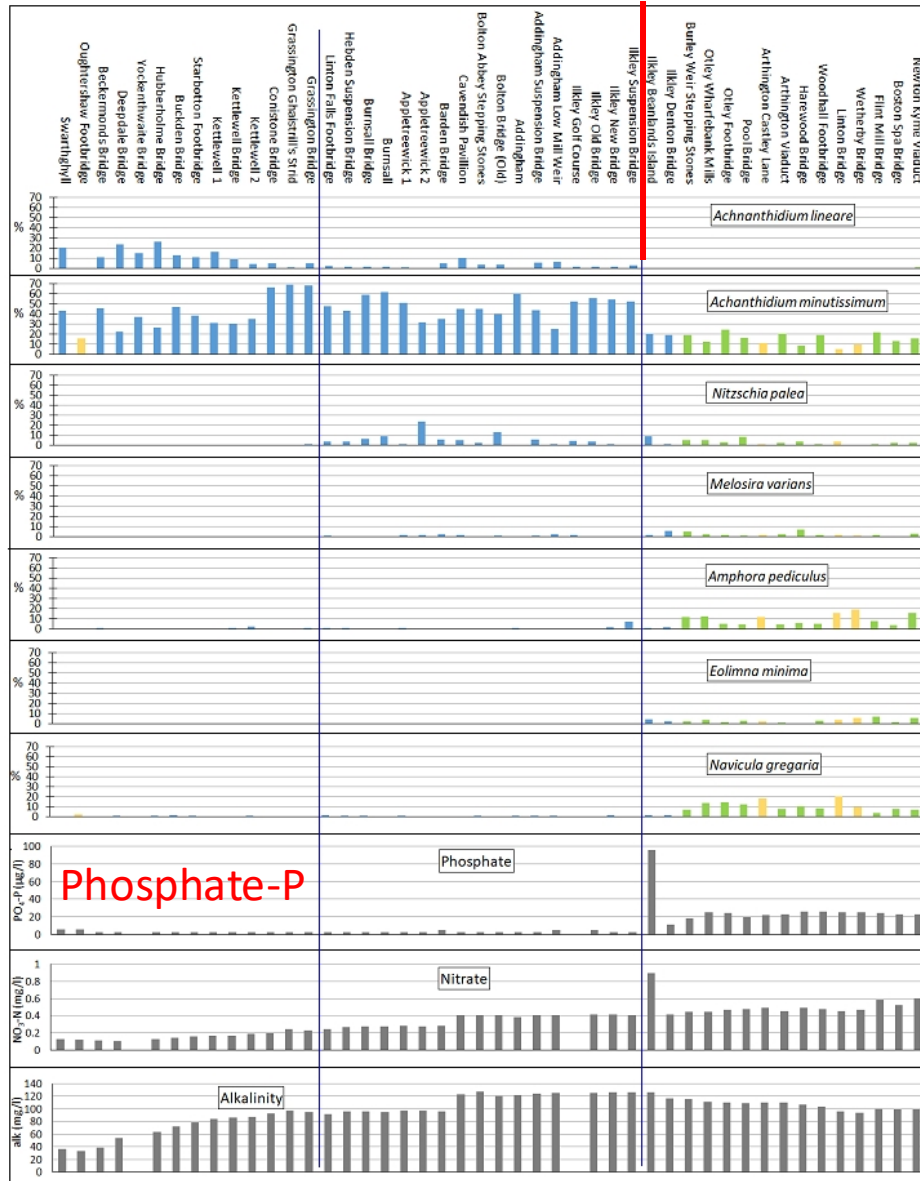


Picture by Kathleen Roberts

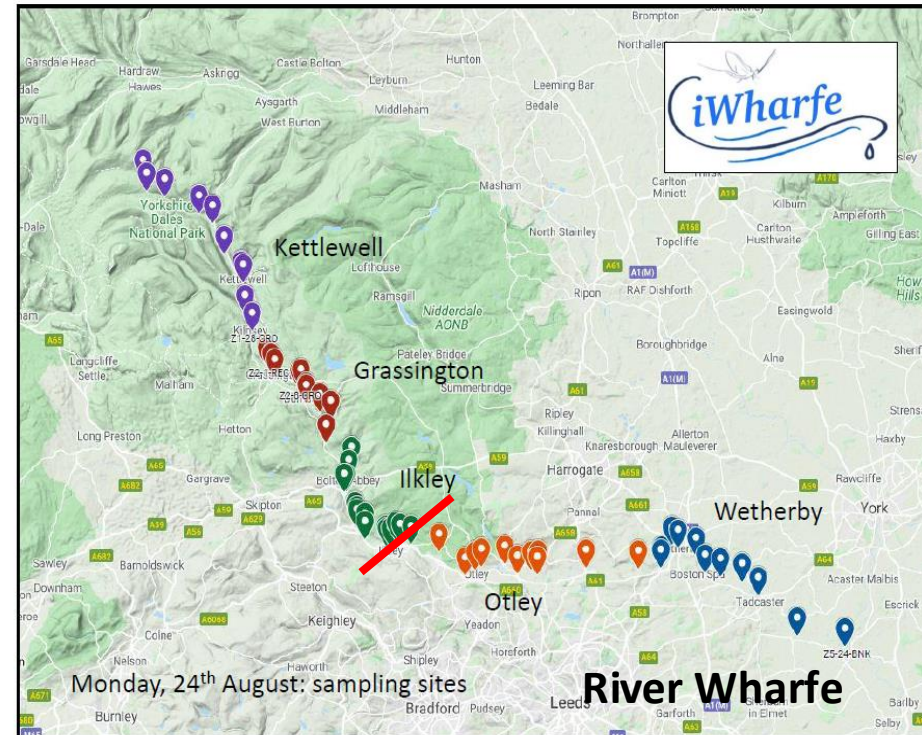
Diatoms and nutrient chemistry

Grassington

Ilkley



It is also indicated by changes in algal composition.
The most serious change in the Wharfe occurs
as a result of **discharged “treated”
effluent from the Ilkley STW**



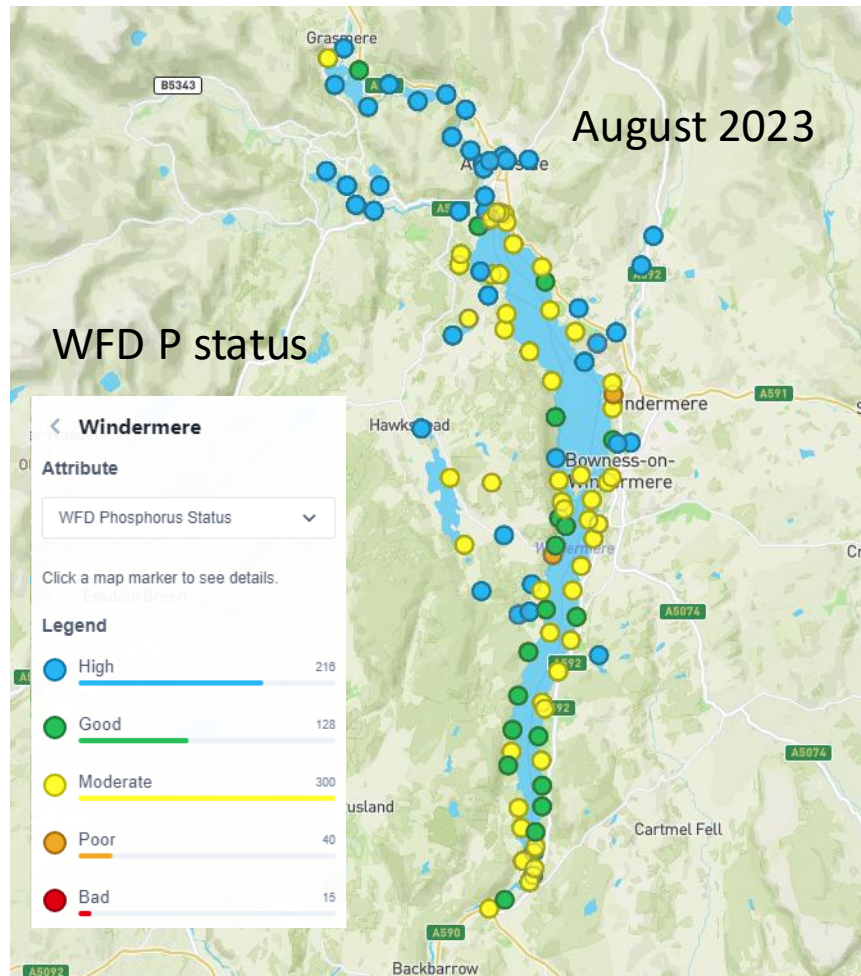
iWharfe was a joint project between the Ilkley Clean River Group, Addingham Environment Group and the Yorkshire Dales Rivers Trust

In deeper, slower flowing lowland rivers it is expressed by the **abundance of algae** growing in the **water column, replacing aquatic plants** (especially water crowfoot), restricting **light penetration**, increasing **nighttime oxygen demand** and fundamentally **changing the whole ecosystem**

In this case (the Wye) the nutrient pollution is primarily from intensive chicken farms



Lakes are even more vulnerable to eutrophication than rivers, due to their water residence time and susceptibility to **deep water oxygen loss**. For **Windermere** despite the introduction of P stripping from the main STWs in the early 1990s, P concentrations are still too high and **cyanobacteria blooms remain common**

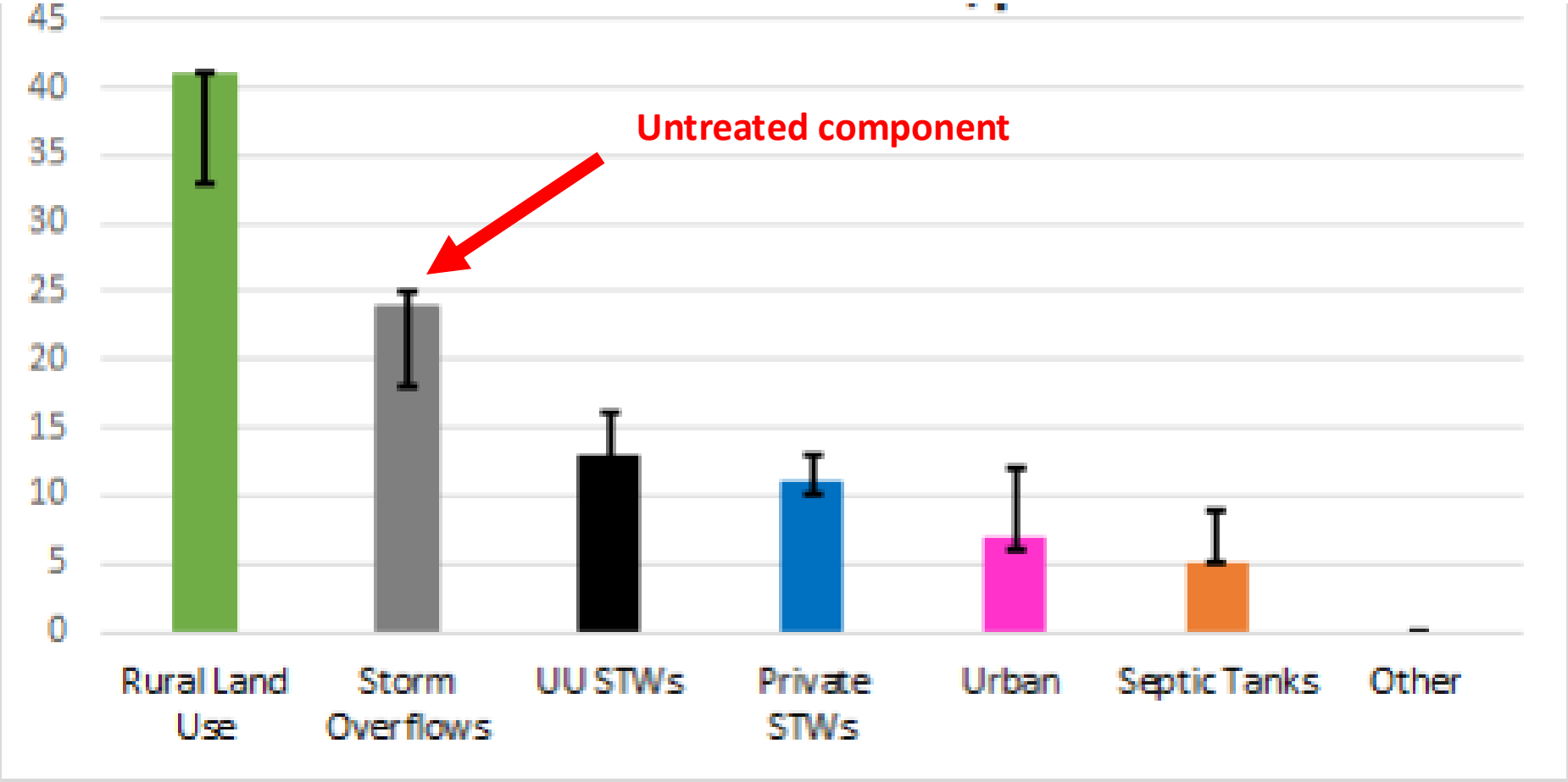


FBA/Lancaster Big Windermere Survey, August 2023

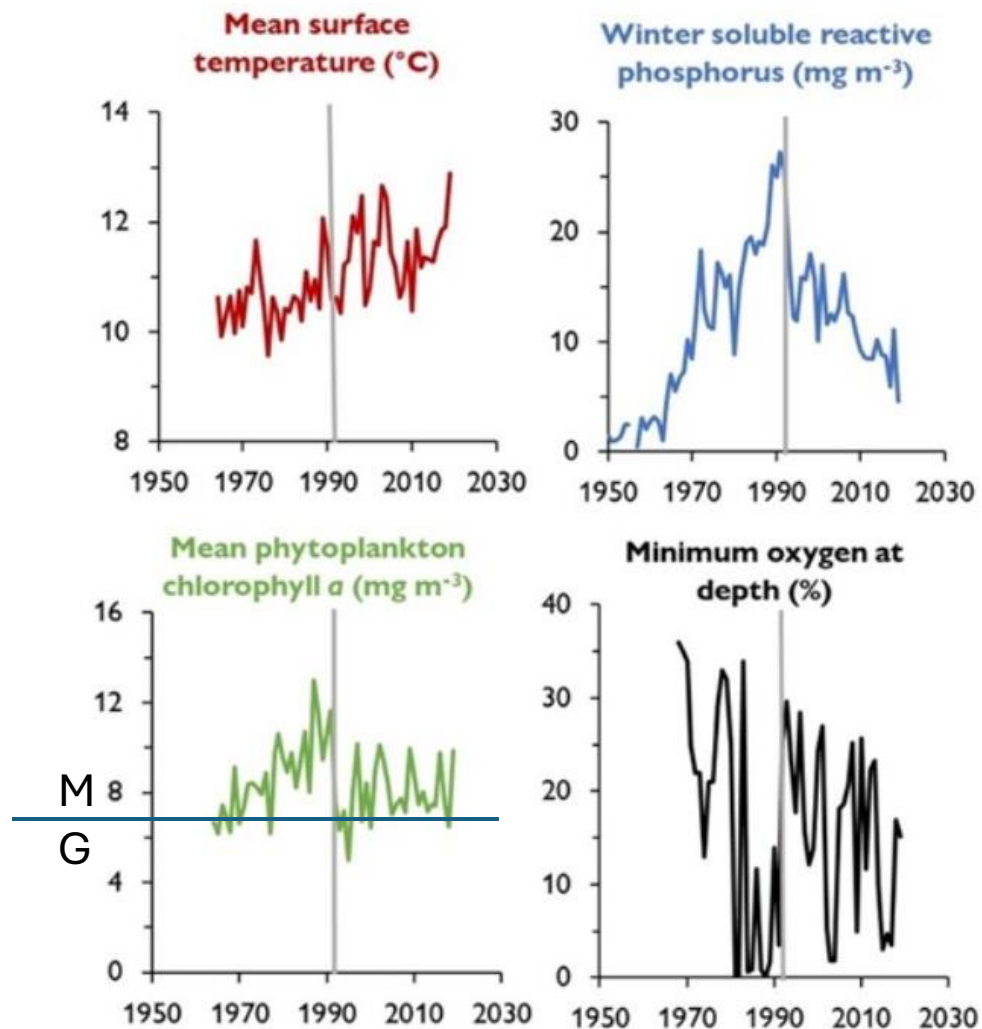


Environment Agency photo from the Westmorland Gazette June 2024

EA modelling for Windermere North Basin shows that **52%** of the phosphorus comes from **point sources (sewage)** and **48%** from **diffuse sources (rural and urban runoff)**. Half of the amount from point sources is estimated to come from **storm overflows**



Long-term trends (1960 – 2020) in water quality for Windermere South Basin



- Phosphorus inputs need to be reduced from all sources, especially from **storm overflows**
- Phosphorus inputs need to be reduced also to **counter the effects of climate change**
- Increasing **surface water temperature** favours algal growth especially the growth of **cyanobacteria** in summer.
- And increasing **deeper water temperature**, **algal decomposition** and **organic waste discharge** leads to a reduction in deep water **oxygen** concentration, threatening the survival of the iconic **arctic char** fish population
- **Char** are also threatened by competition with **roach** that have **invaded** rapidly probably **due to climate change**

Windermere has its problems, but it's quite healthy compared to Lough Neagh, the UK's largest lake. A massive algal bloom occurred in 2023



Copernicus Sentinel-2 RGB, 4th September 2023
from Reid et al. 2024



Toome lock, 23rd August 2023, from Reid et al. 2024

There has been a major increase in nutrient pollution over the last 20 years following a huge expansion in **intensive livestock farming** in the catchment



And, despite infrastructure investment by NI Water, **sewage effluent still accounts for over 20% of the phosphorus load on the lake**

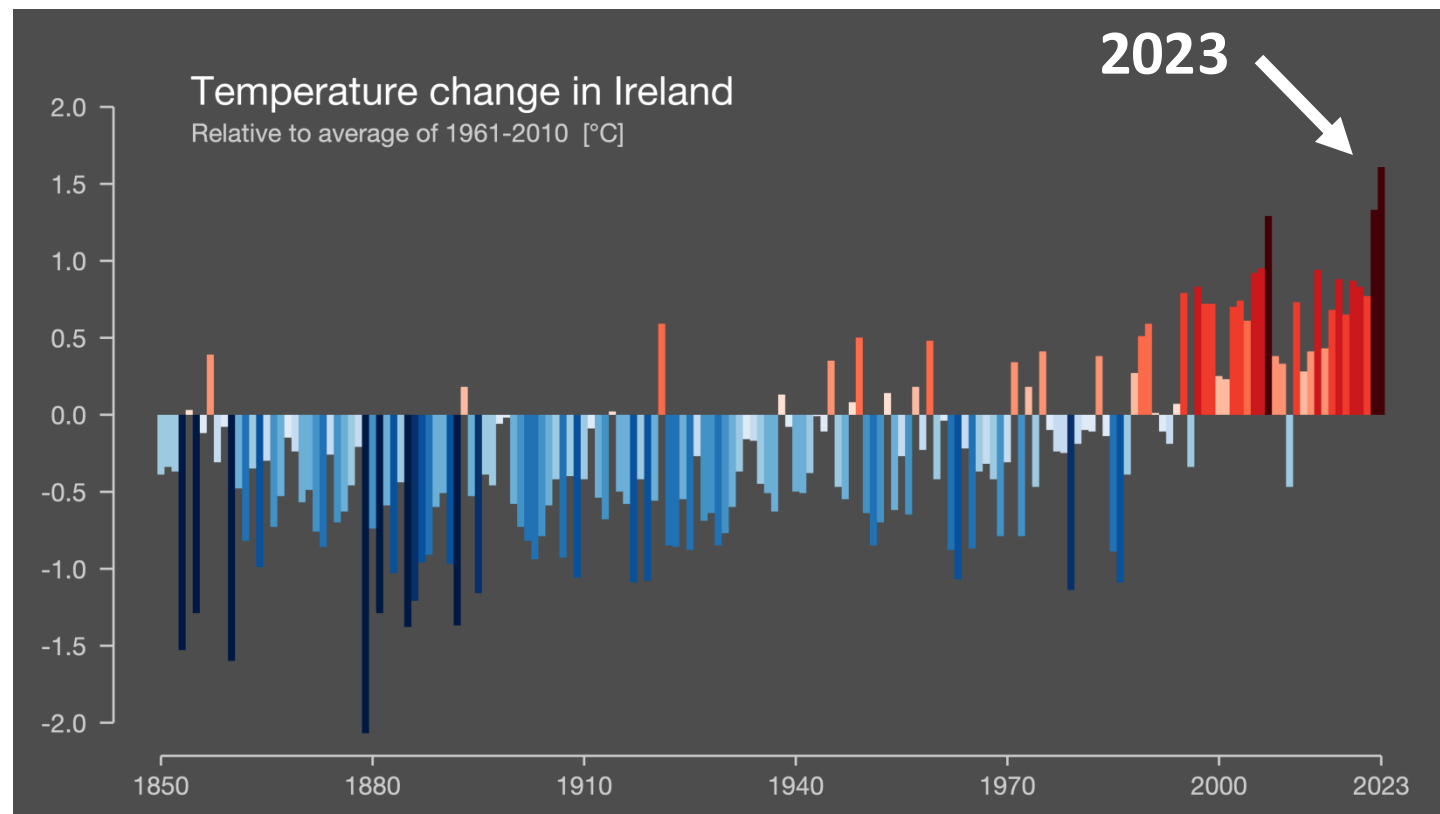
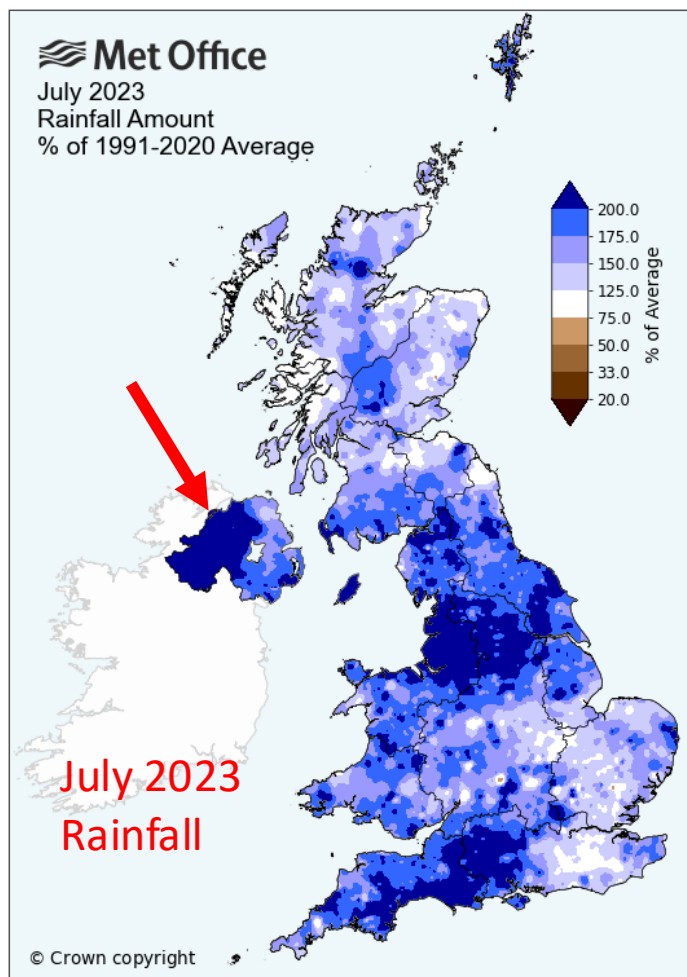


Moreover, the lake has been invaded by **non-native zebra mussels**, first noticed in 2005 and spreading rapidly from 2017. They are **filter feeders** removing “desirable” algae and favouring “undesirable” algae especially **toxin containing cyanobacteria**



Zebra Mussels in lower Lough Erne, county Fermanagh, Northern Ireland. Credit: Robert Thompson
/ [Alamy Stock Photo](#)

The algal bloom in 2023 was triggered by **unusually wet weather** in July, washing pollutants into watercourses, and by **warm water** favouring the growth of cyanobacteria. 2023 was the **warmest year on record in Ireland**.



<https://showyourstripes.info/c/europe/ireland/all>

The consequences of this ecological time bomb for the economy of Northern Ireland are immense

- 50% of Belfast's **drinking water** comes from Lough Neagh
- The Lough Neagh **eel industry** (Europe's largest) is collapsing
- The **agricultural business model** in Northern Ireland is shown to be unsustainable



Summary

- **Human health** is directly threatened in rivers and lakes by **faecal pathogens and toxic cyanobacteria** from sewage (treated and untreated) and farm livestock
- **Ecological health** is threatened by the impact of **organic matter on oxygen demand** and by **nutrient**, especially **phosphorus**, pollution from **sewage and agriculture**
- Conditions are made worse by **climate change**, both from **warming** (favouring the growth of cyanobacteria and reducing dissolved oxygen concentrations) and from the increased intensity of **precipitation** (inwashing pollutants from agricultural land and urban surfaces, and overloading sewer networks)
- **Invasive species**, favoured by warming and nutrients, **disrupt food webs**
- Improvement is possible but **recovery to a “natural state” is unlikely (at least for lakes)** as climate change and the impact of other irreversible pressures, especially the disruptive effect of invasive species, has **shifted ecological baselines**
- Solutions need to focus on **(i) minimising the discharge of untreated effluent and agricultural slurry to reduce oxygen demand on water bodies;** and **(ii) on minimising nutrient pollution from treated and untreated sewage, septic tanks, and agricultural manures and fertilisers**

Thanks to Ilkley Clean River Group, Addingham Environment Group, Yorkshire Dales Rivers Trust and Henderson Ecology



Prof Alistair Boxall – Chemicals





Natural
Environment
Research Council



The Problem of Chemical Pollution in Yorkshire's Rivers





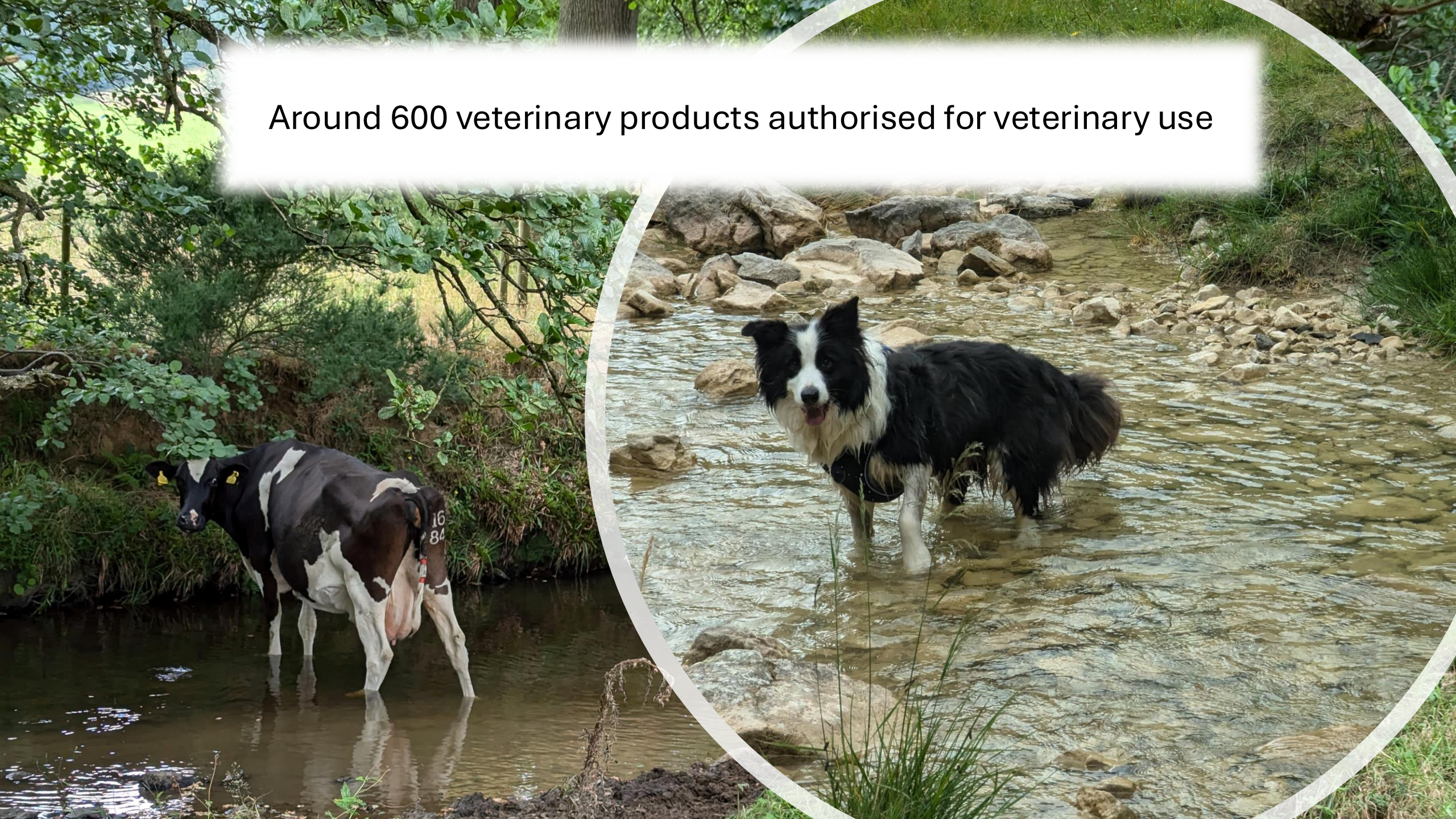
Over 4000 chemicals and chemical mixtures
used in typical UK households
Outside emissions from transport, buildings and
waste disposal



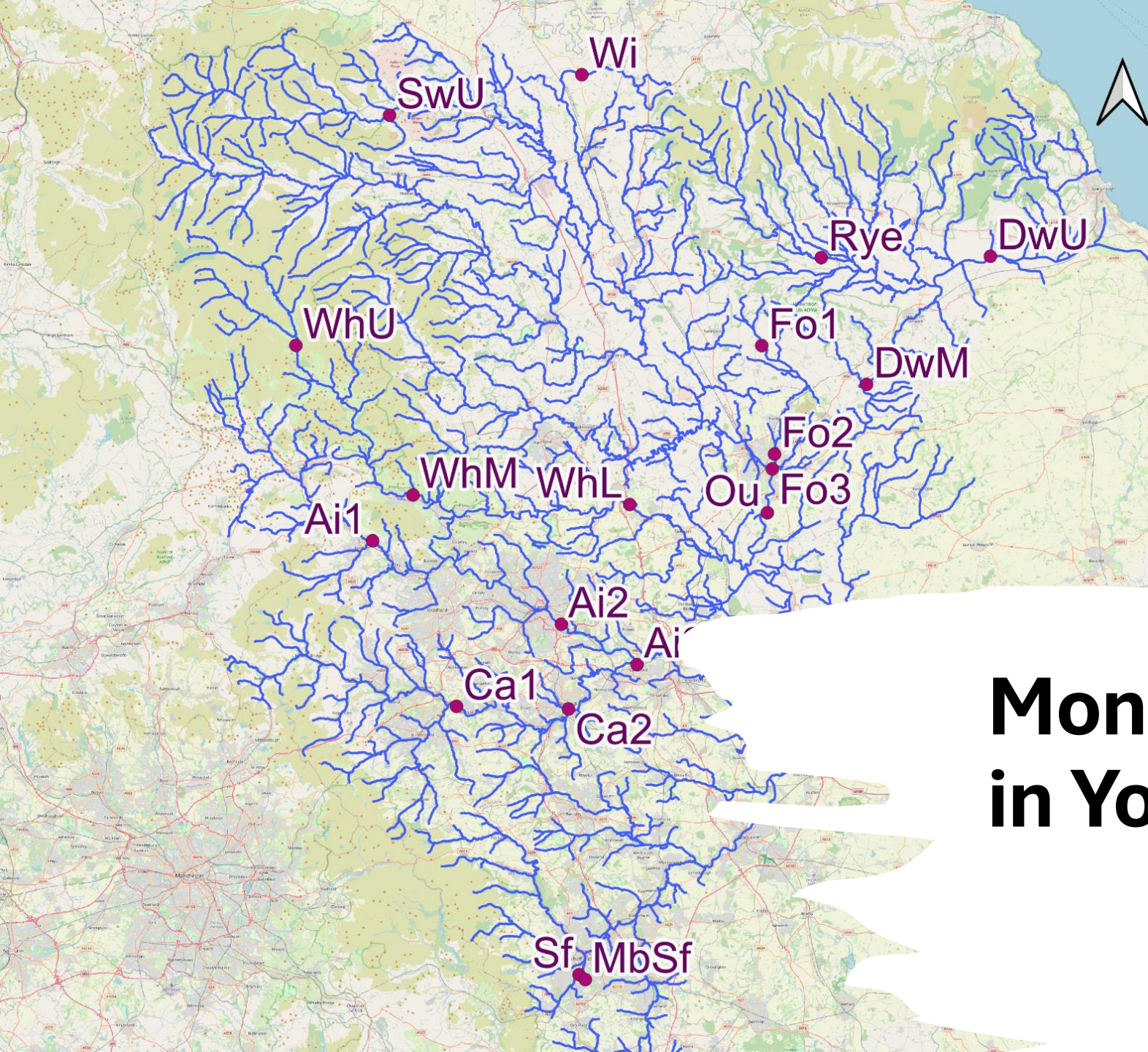


**Around 500
pesticides
(insecticides,
fungicides,
herbicides)
approved for
use in Europe**

Around 600 veterinary products authorised for veterinary use







Monitoring Chemicals in Yorkshire's Rivers



Analysed for a mix of chemicals



Fipronil, Imidacoprid,
Permethrin, Moxidectin,
Deltamethrin



Tebuconazole, Azoxystrobin, Triallate,
Metazachlor, Cypermethrin, Trifloxystrobin,
Pyraclostrobin, Dimoxystrobin,
Difenoconazole, Cu, Flufenacet



Ivermectin, Doramectin, Eprinomectin,
Moxidectin, Deltamethrin, Tylosin,
Lincomycin, Cu, Zn



Miconazole, Fluconazole,
Azithromycin, Erythromycin,
Diclofenac, Ibuprofen,
Venlafaxine, Metformin



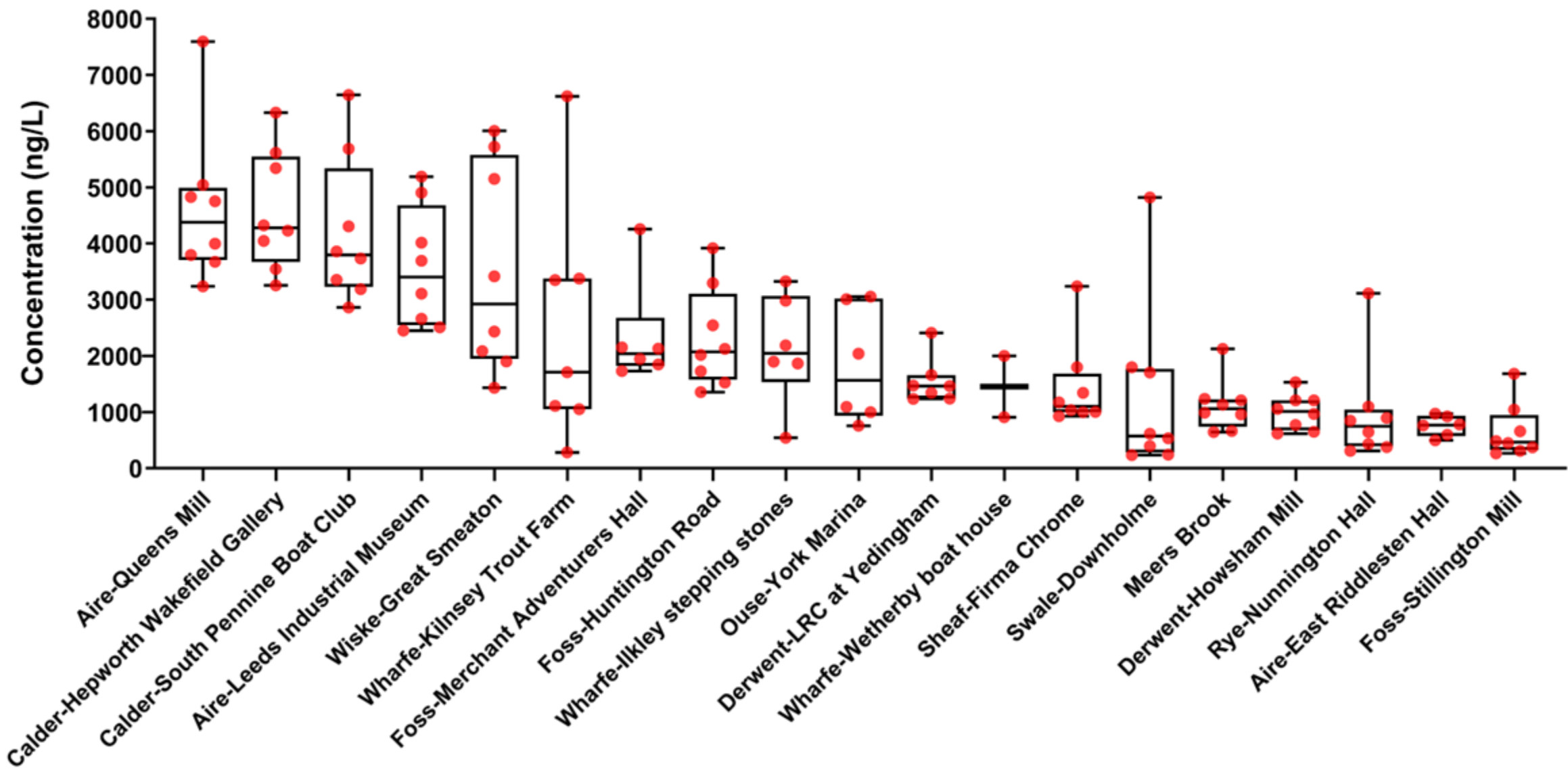
Octenidine HCl, Kathon CG,
Homosalate, Octocrylene,
Tinosorb S, Zn



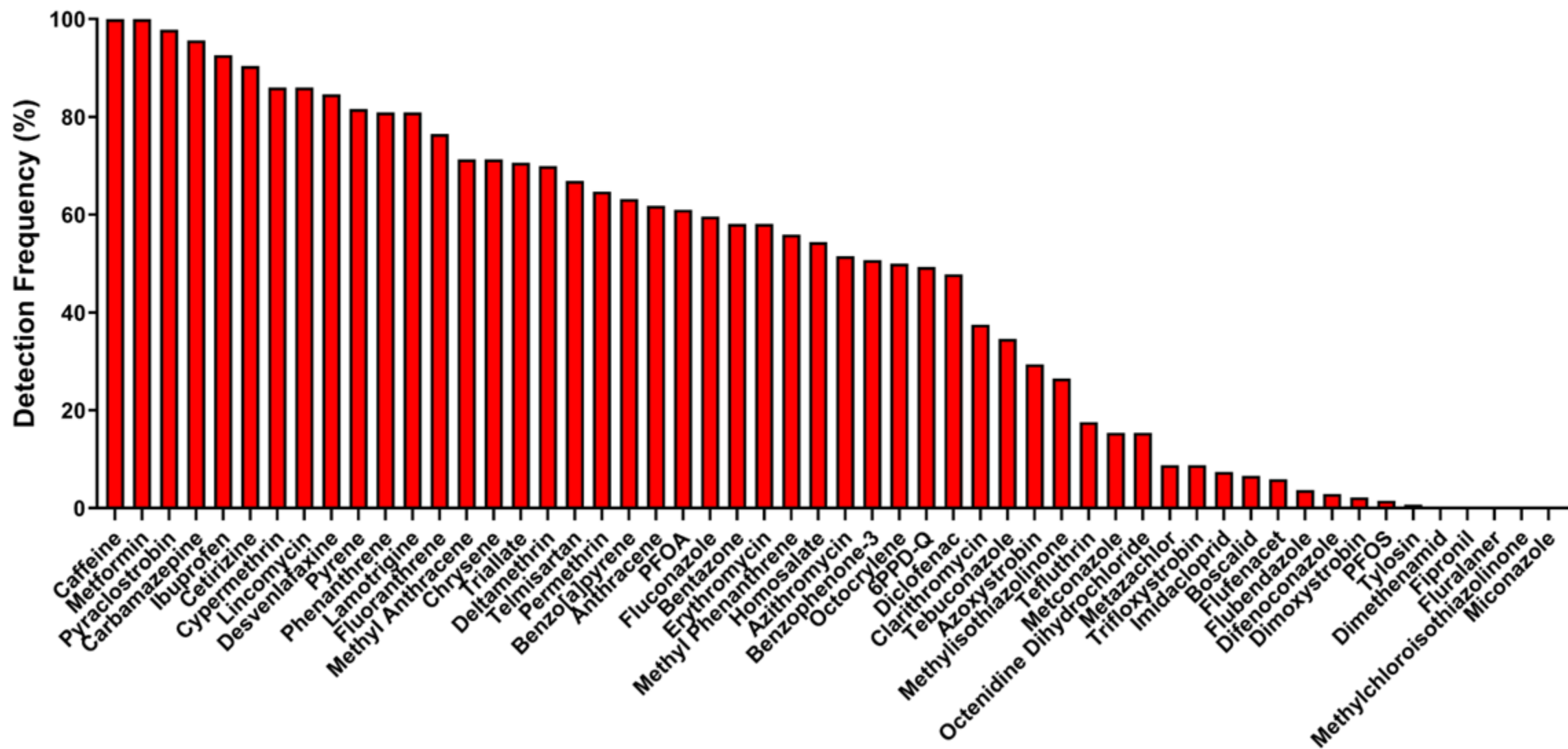
Fluoranthene, Benzo(a)anthracene,
Pyrene, Fluoranthene, 6-PPD, Cu,
Zn

Results (months 1 & 2)

Total Concentrations by Site for Organic Chemicals



Detection Frequency of Organic Chemicals



Environment Agency Monitoring

- Suspect screening at some locations
- Samples analysed for around 2000 substances
- Mixture of chemicals detected including pharmaceuticals, veterinary medicines, combustion products, personal care products and general industrial chemicals
- Broader monitoring data available for WFD priority substances



What are the impacts?

Mortality

Reproduction and growth

Behaviour

Heartbeat

Photosynthesis

Biochemistry

Antimicrobial resistance





What can we do?

- Extend the current debate around sewage discharges to consider chemical contaminants
- Better monitoring of chemicals in our rivers
- Research to understand the real impacts of chemical pollution
- Improved product design, stewardship and treatment
- We can all play a role

**Big thanks to all the volunteers who help
collect samples and host the
autosamplers!**



Prof Jamie Woodward – Microplastics

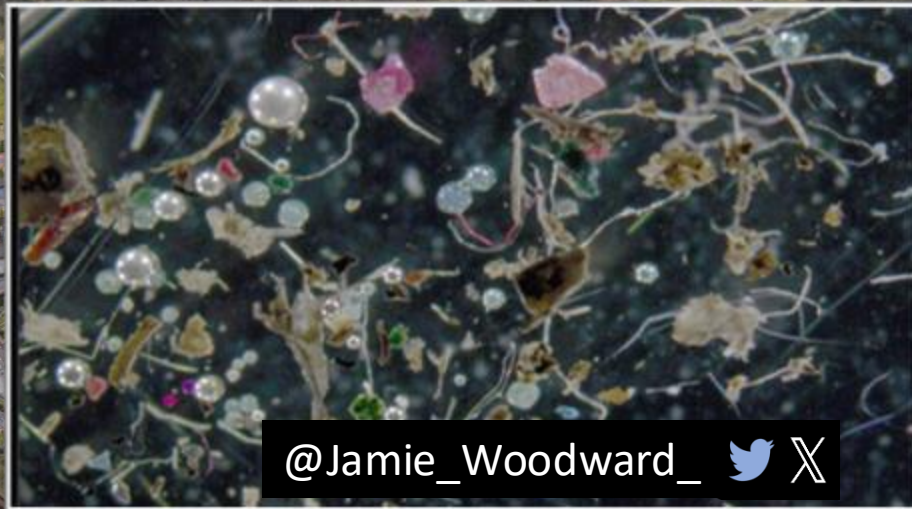


ILKLEY
CLEAN RIVER
GROUP

Microplastics on river beds: what can they tell us about storm overflows?

Professor Jamie Woodward

Department of Geography, The University of Manchester, UK



MANCHESTER
1824

The University of Manchester

@Jamie_Woodward_  

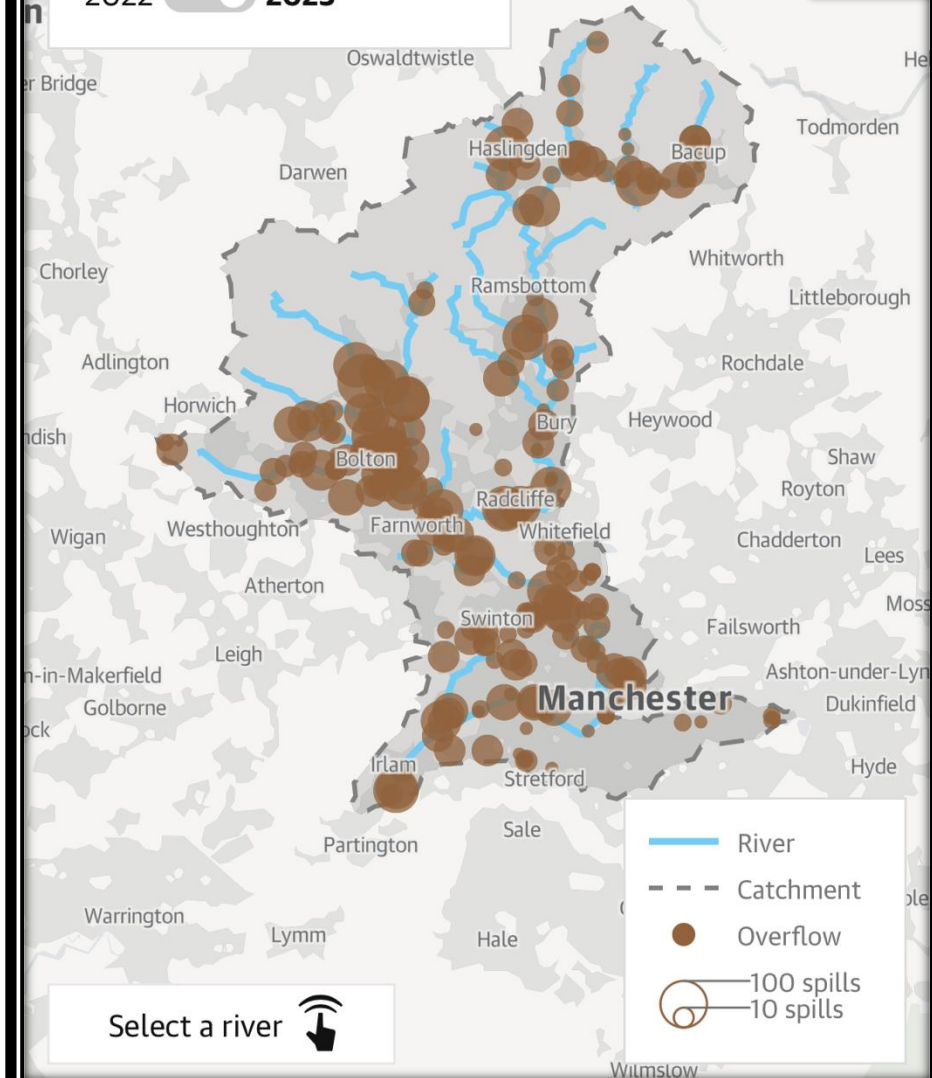


Croal Irwell

Overflows managed by
United Utilities

11,974 spills in 2023

2022 ☐ 2023 ☒



England's sewage crisis: how polluted is your local river and which regions are worst hit?



Rivers in the north of **England** are bearing the brunt of the sewage pollution crisis, analysis by the Guardian reveals, with the region's waters experiencing the highest rates of waste discharge in the country.

Storm overflows around the Irwell valley, where the rivers Croal and Irwell run through to Manchester, discharged raw sewage 12,000 times in 2023 – the highest rate of all English rivers when accounting for length, at 95 spills per mile.

Health

Microplastics found in every testicle tested in new study

May 21 • Written by [Chantelle Billson](#)

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Researchers have found microplastics in canine and human testicular tissue. (Getty)

Microplastics have been detected in every human testicle examined in a new study, raising questions about the possible impact on health and fertility.

The research, led by the University of New Mexico and published in the journal [Toxicological Sciences](#), looked at testicular tissue taken from dogs and humans. The scientists tested 23 human and 47 dog [testes](#).



New Scientist [@newscientist](#) · [Follow](#)

17 March 2024



Microplastics have been linked to a greater risk of heart attack and stroke. People with artery plaques are four times more likely to develop the health problems if their plaques contain microplastics.



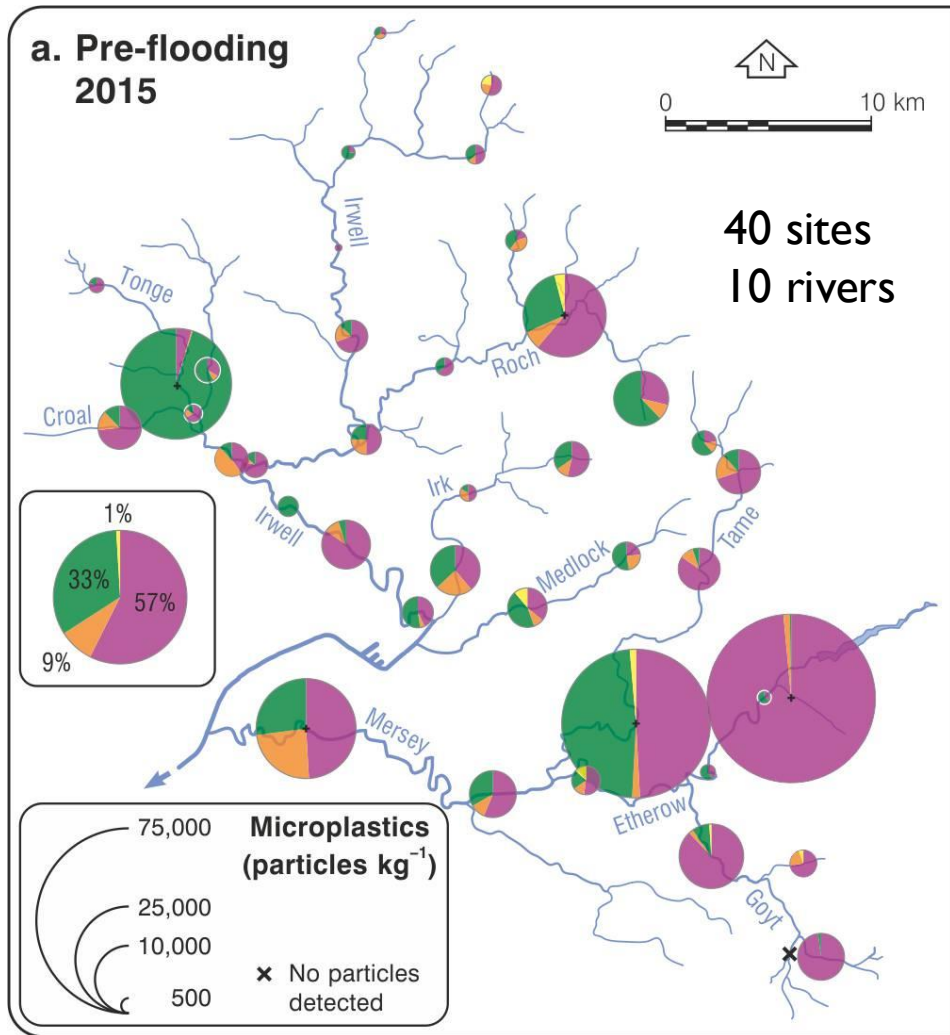
[newscientist.com](#)

Microplastics linked to a greater risk of heart attack and stroke

People with artery plaques containing microplastics were about four times as likely to have a heart attack or stroke as those with plastic-free plaques

In 2015 we showed that UK river beds were contaminated with microplastics

Why does this matter?



Big flood

Typical flood

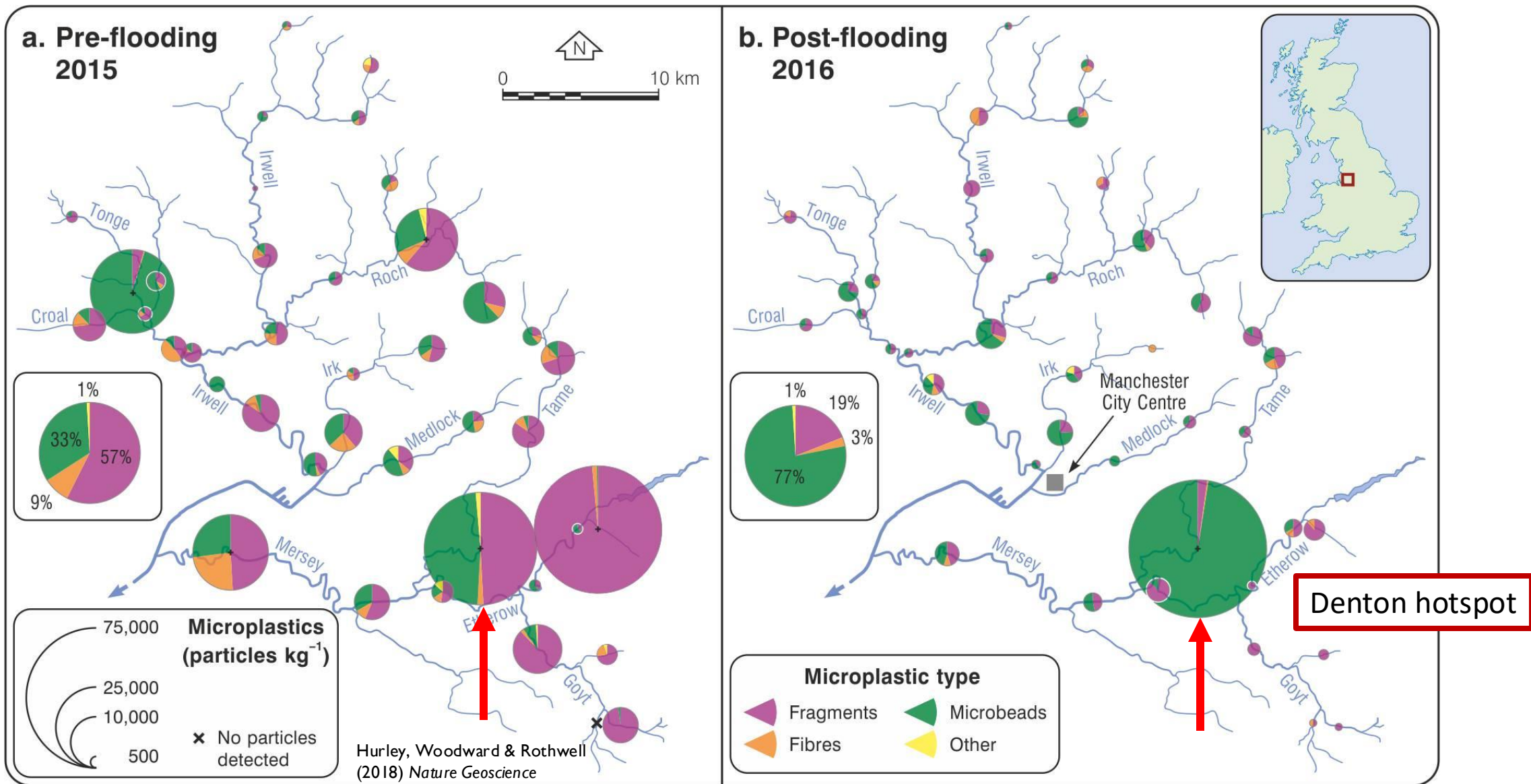


In 2016 we showed that floods flush the river bed microplastics downstream (Hurley, Woodward and Rothwell, 2018)



Sample collection

- We isolate a known area of river bed
- Agitate the gravel bed to bring fine sediments and microplastics into suspension
- Bulk samples of muddy water are returned to the lab
- We extract, identify, and count the microplastics
- Size range 50–1000 μm (~sand-sized microplastics)



- Microplastics are found in all parts of these catchments
- Some reaches are very heavily contaminated
- Varied microplastic assemblages

- Rapid turnover of the channel bed microplastic load
- Even moderate flood events wash microplastics away
- Microplastic hotspots can form rapidly

Microplastic contamination of river beds significantly reduced by catchment-wide flooding

Rachel Hurley *, Jamie Woodward* and James J. Rothwell

Microplastic contamination of the oceans is one of the world's most pressing environmental concerns. The terrestrial component of the global microplastic budget is not well understood because sources, stores and fluxes are poorly quantified. We report catchment-wide patterns of microplastic contamination, classified by type, size and density, in channel bed sediments at 40 sites across urban, suburban and rural river catchments in northwest England. Microplastic contamination was pervasive on all river channel beds. We found multiple urban contamination hotspots with a maximum microplastic concentration of approximately 517,000 particles m⁻². After a period of severe flooding in winter 2015/16, all sites were resampled. Microplastic concentrations had fallen at 28 sites and 18 saw a decrease of one order of magnitude. The flooding exported approximately 70% of the microplastic load stored on these river beds (equivalent to 0.85 ± 0.27 tonnes or 43 ± 14 billion particles) and eradicated microbead contamination at 7 sites. We conclude that microplastic contamination is efficiently flushed from river catchments during flooding.

Sources of microplastics

*Urban wastewater is full of microplastics
Combined sewer network – foul and rainwater*

Trade effluents
Fibres, microbeads, fragments

Wastewater Treatment Works

Domestic wastewater
Fibres, microbeads

*Only supposed to discharge untreated
wastewater during “exceptional conditions”*

Road runoff
Fragments, tyre wear

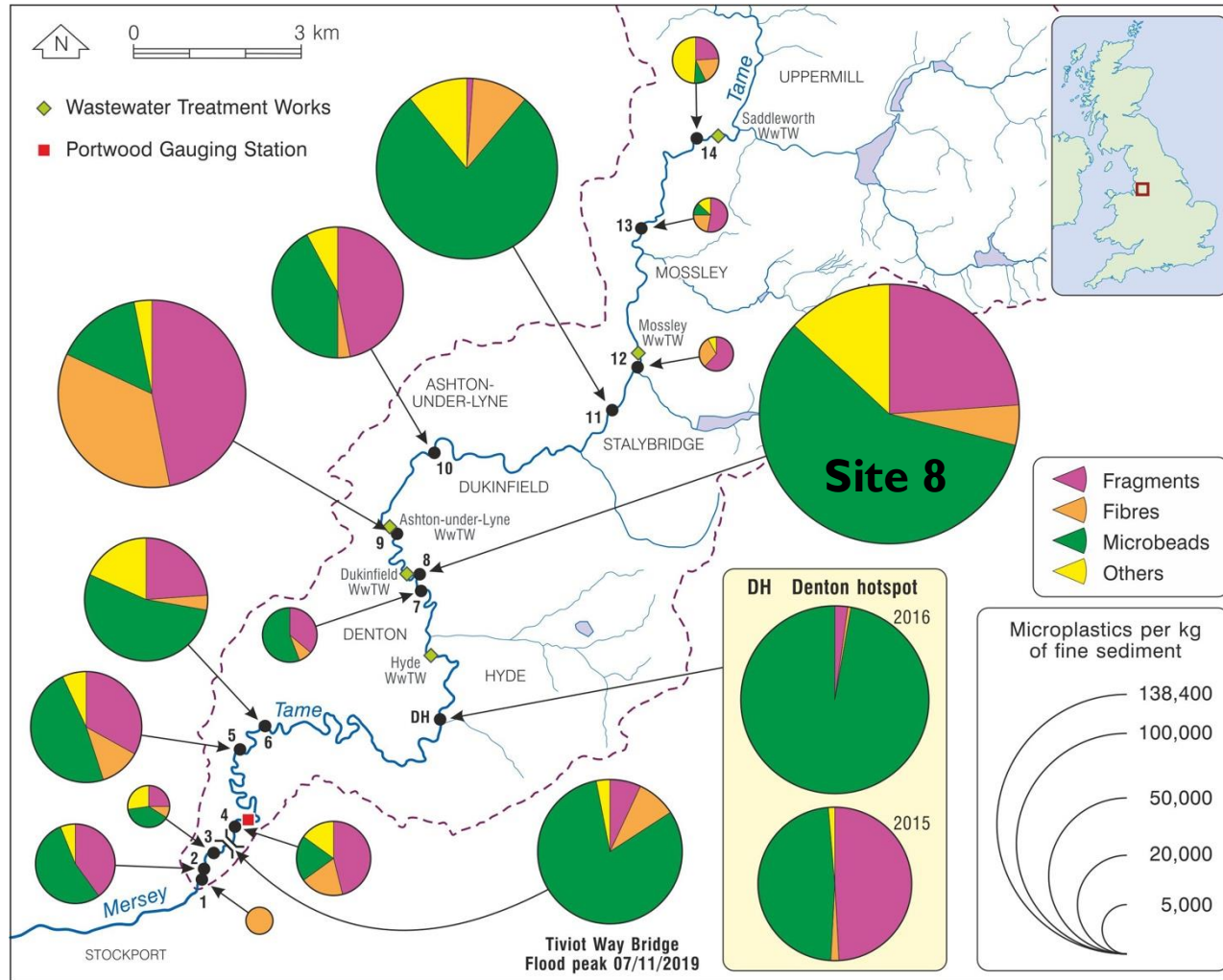
Agriculture?

*Conventional wastewater
treatment can remove 95–99% of
microplastic particles*

*The presence of microplastic
particles on river beds in high
concentrations tells us that
wastewater treatment is not
taking place as it should.*

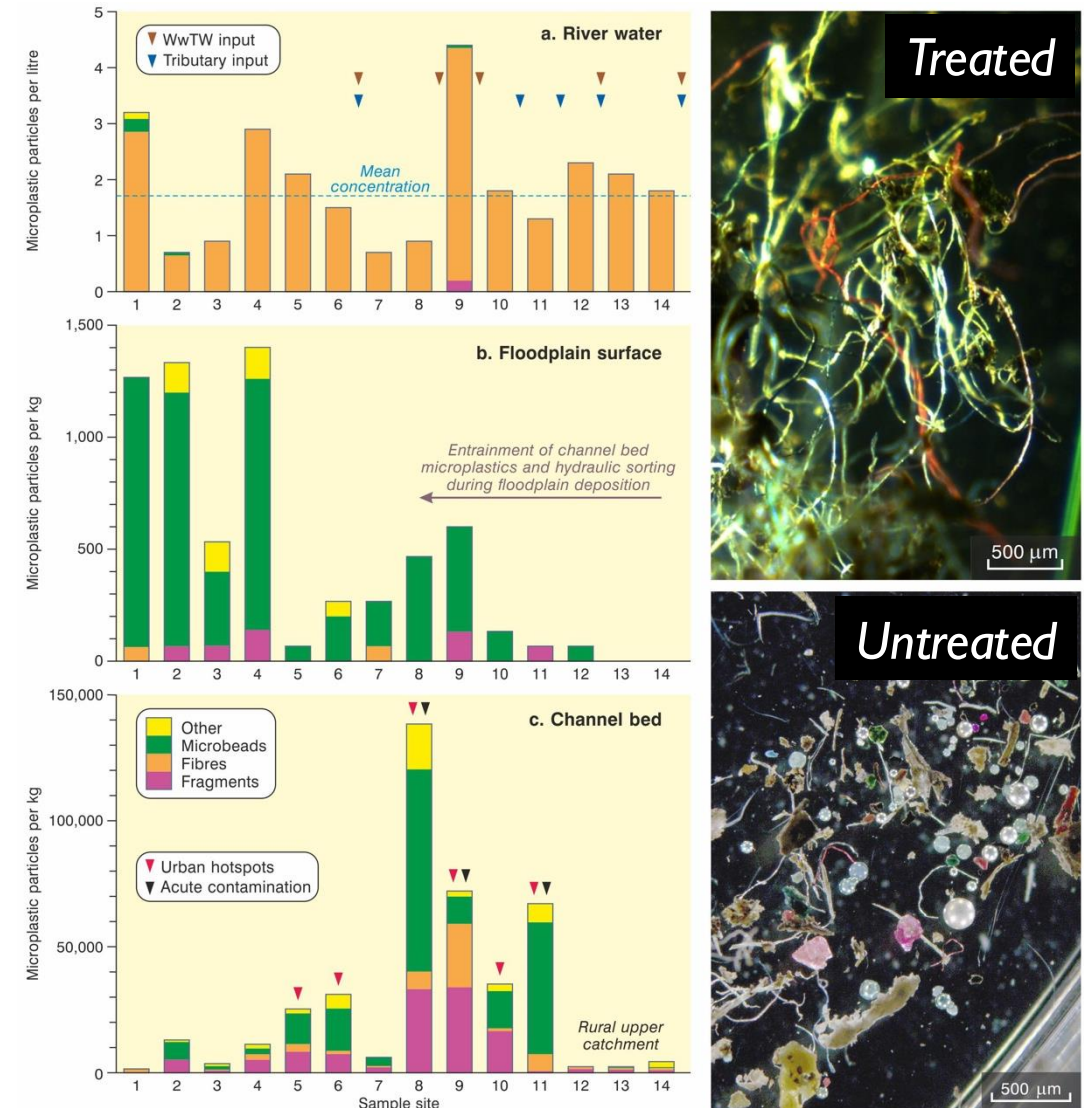
“If microplastics are readily transported under high flows, how do river beds become so heavily contaminated?”

Channel bed microplastic accumulation after a large flood



“If microplastics are readily transported under high flows, how do river channel beds become so heavily contaminated?”

Microplastics: fluvial geomorphological context





Acute riverine microplastic contamination due to avoidable releases of untreated wastewater

Jamie Woodward ¹✉, Jiawei Li¹, James Rothwell¹ and Rachel Hurley ^{1,2}

12 May 2021

Wastewater discharge to rivers is a controversial practice that compromises water quality, aquatic habitats and human health worldwide. Here we show how untreated wastewater laced with microplastics and raw sewage is routinely discharged into UK river flows that are too low to disperse the microplastics downstream. These ‘dry weather’ spills lead to acute microplastic contamination of river bed habitats. Many aquatic fauna feed in the benthic zone, the quality of which affects the entire riverine ecosystem. All microplastic types accumulate to high concentrations on the channel bed until flushed downstream by floods. These findings pose fundamental questions about the sustainable management of urban wastewater. Treating the wastewater would shut down the major source of microplastic fragments and microbeads in such rivers and prevent their transport to the ocean. Riverine microplastic transport is primarily partitioned between: (1) continuous transport at low concentrations of synthetic fibres from treated wastewater effluent; and (2) episodic flood-driven transport of the full microplastic assemblage entrained from contaminated channel beds. Focusing only on the buoyant non-flood microplastic load can produce highly unrepresentative assessments of riverine microplastic contamination. Climate warming and urban population growth will intensify the microplastic burden on many river ecosystems as summer baseflows decline and wastewater fluxes increase.

“Here we show how untreated wastewater laced with microplastics and raw sewage is routinely discharged into UK rivers flows that are too low to disperse the microplastics downstream.”

United Utilities statement on microplastics research



13 May 2021

Jo Harrison, Director of Environmental Planning and Innovation, said:

“As a society, it is vitally important that we increase our understanding of microplastics pollution, allowing us to develop meaningful solutions to tackle this significant issue – and United Utilities is already working with others to address the problem.

It’s therefore disappointing to see a number of flaws in the University of Manchester’s research, which takes a narrow view of the issue and makes several assumptions without evidence.”

8th July 2021

Environmental Audit Committee evidence gathering field visit to the River Windrush catchment near Oxford

Rt Hon Philip Dunne MP
Chair of Environmental
Audit Committee



House of Commons
Environmental Audit Committee

Water quality in rivers

Fourth Report of Session 2021–22

Report published
in January 2022

1. The [Environment Agency](#) must extend the number of substances it regularly monitors in rivers. The data that is being collected does not provide a comprehensive picture of risks to human health, aquatic life, or microplastic contamination in rivers. We recommend a UK-wide survey of emerging pollutants and microplastic pollution of river environments, including an assessment of their potential impact on aquatic ecology.



16 May 2023

What next?



Environment
Agency



The EA is now developing its national strategy for monitoring microplastics in rivers.



Every fish ($n=48$) analysed from the Tame contained microplastic particles

Badiozaman Sulaiman

Jamie Woodward

Holly A Shiels



"Dirty Water"

by Ryan O'Riordan

(co-leader of London Climate Choir)

In collaboration with Ilkley Car Free
Festival and the Clean Rivers Singing
Workshop



ILKLEY
CLEAN RIVER
GROUP

Session 2

Getting our rivers cleaned up – a successful campaign

Chair: James Wallace, River Action



ILKLEY
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Securing a clean river for people and the environment.

Ilkley Clean River Group: Prof Rebecca Malby

The Strategy



Have an end-point (an ambition/ clear goal) – the purpose of your campaign



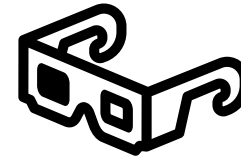
Know what's going on now (your baseline) – data and stories.



Make this visible to the public (media/ bathing status)



Make it impossible to walk away from the extent of the pollution and the public outrage.



Hold the agencies to account and deliver their responsibility to them (bathing status...)



Collaborate with local groups.

Ilkley Clean River Group 3 Objectives

Stop

Stop YW Pumping solids into the river

Stop

Stop sewage discharge outside Storm conditions (UWWTD*)

Upgrade

Upgrade our sewage system to cope with our population and climate change

* Urban Waste Water Treatment Directive

What was happening? Baseline



It starts with children being sick and multiple sightings and reporting of foul discharge into the river



SAT 16:21

Hi Karen my daughter became very ill after swimming in the river at Burley back in July !!! She vomited over and over and over to the point it was every half an hour !!! This then led to her not going into school for 3 days and the upsetting bit was it was the last week of year 6 which meant her missing out in a trip that the teachers had planned as a surprise just got the year 6's !!! It's awful what has been put into the river I think your doing a great job bringing this to light 😊

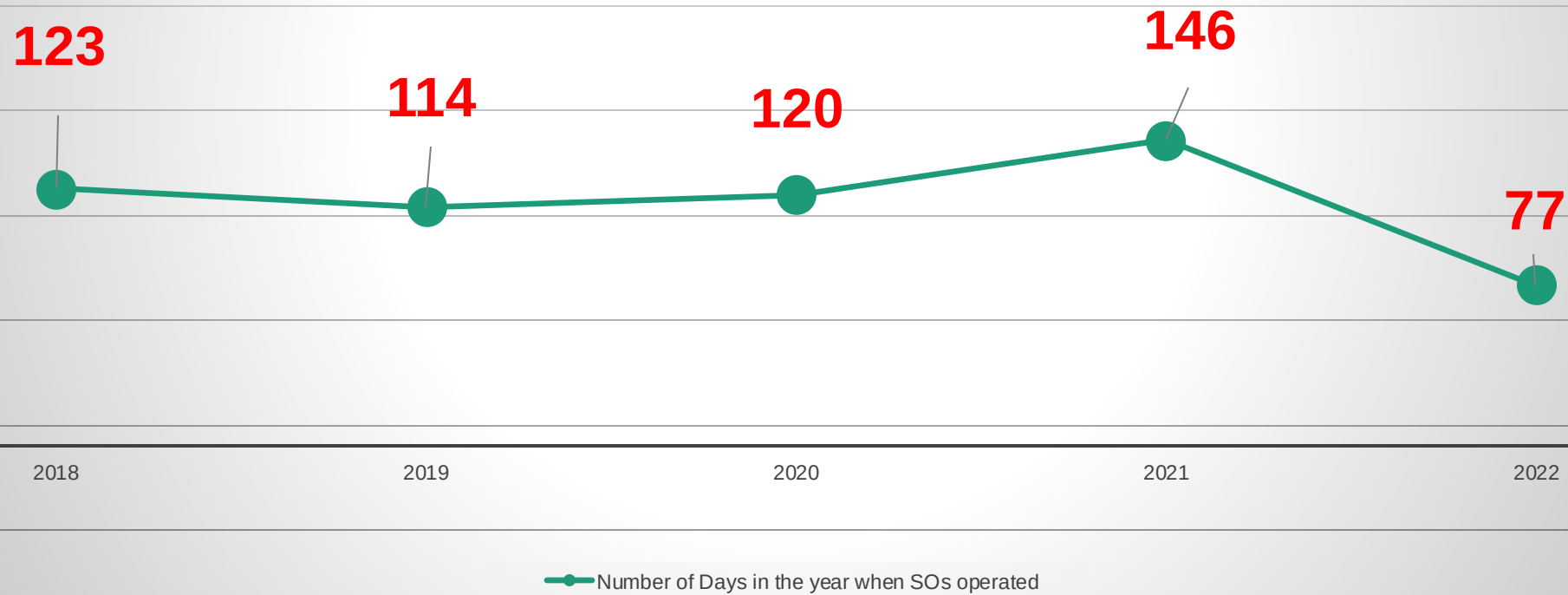
You accepted Helen's request.

I'm appalled at how many responses I've had from this. Thankyou for getting back to me, this will all help to strengthen our cars to help sort it out.

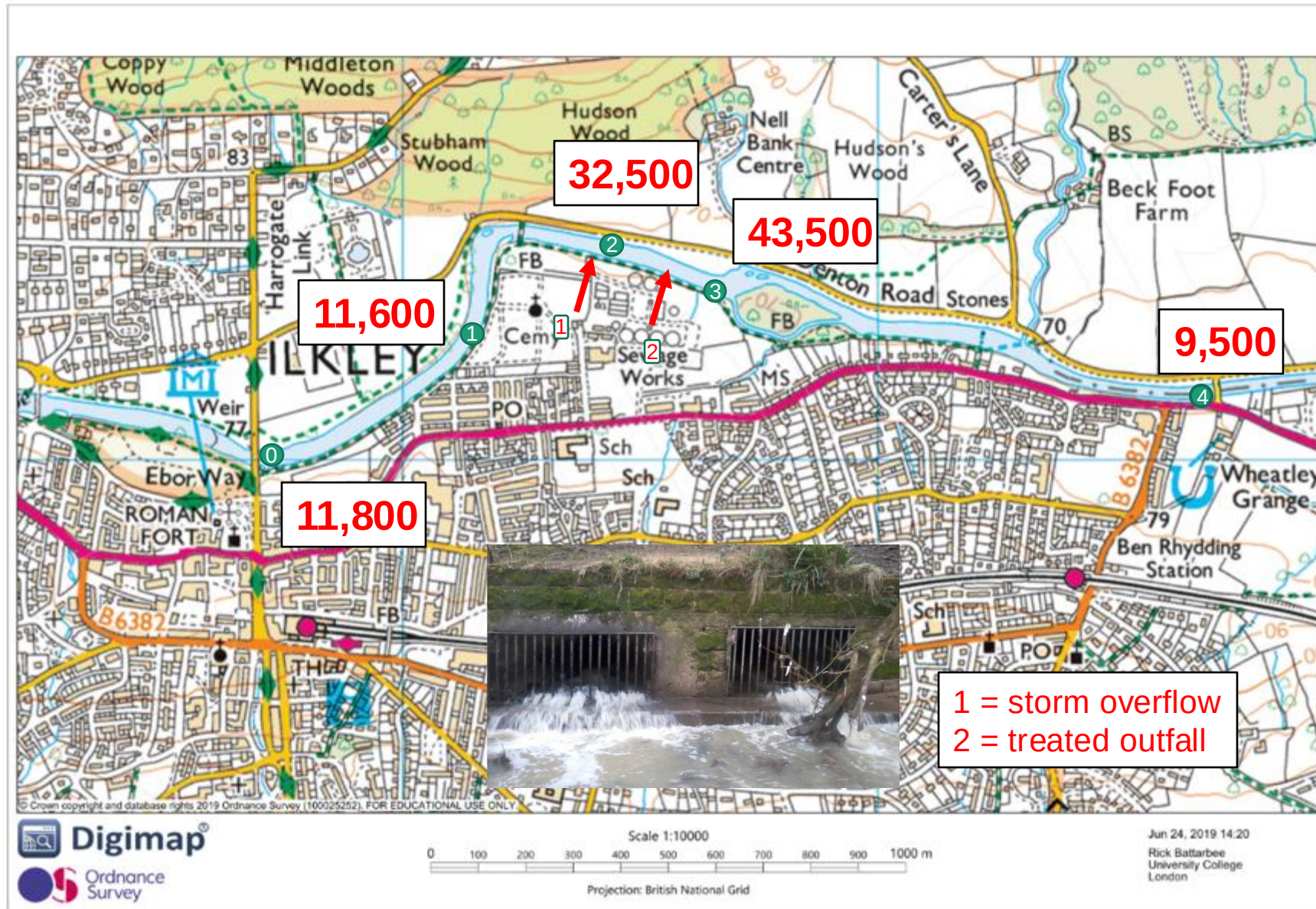
Fingers crossed for you.



Number of Days in the year when SO (raw sewage) was discharged at Ilkley Sewage Works



Ilkley Wharfe: *E. coli* (cfu/100 ml) during high flow and a spill (13th June 2019)



Timeline

2018

Reporting Incidents

Citizen Science Testing at Ilkley
Get the media interested

Hold agencies to account in Town Meetings with media present
Decide to apply for bathing status

2019

More Testing and meet with national EA CEO James Bevan to show the data
He says we are right – the problem is proven and needs action
Apply for BS (counting summer 2019, application submitted Sept 2019)



2nd Town Meeting July 2019

Collaborate on understanding sources of pollution – iWharfe set up with YW, Rivers Trust, EA, Addingham Environment Group

2020

3rd Town Meeting Feb 2020
National consultation on our BS application

Bathing Status application – awarded December 2020. The first BS river in England

National Media

Local Media



3RD TOWN MEETING 20TH FEBRUARY - OUR FIRST SUCCESS

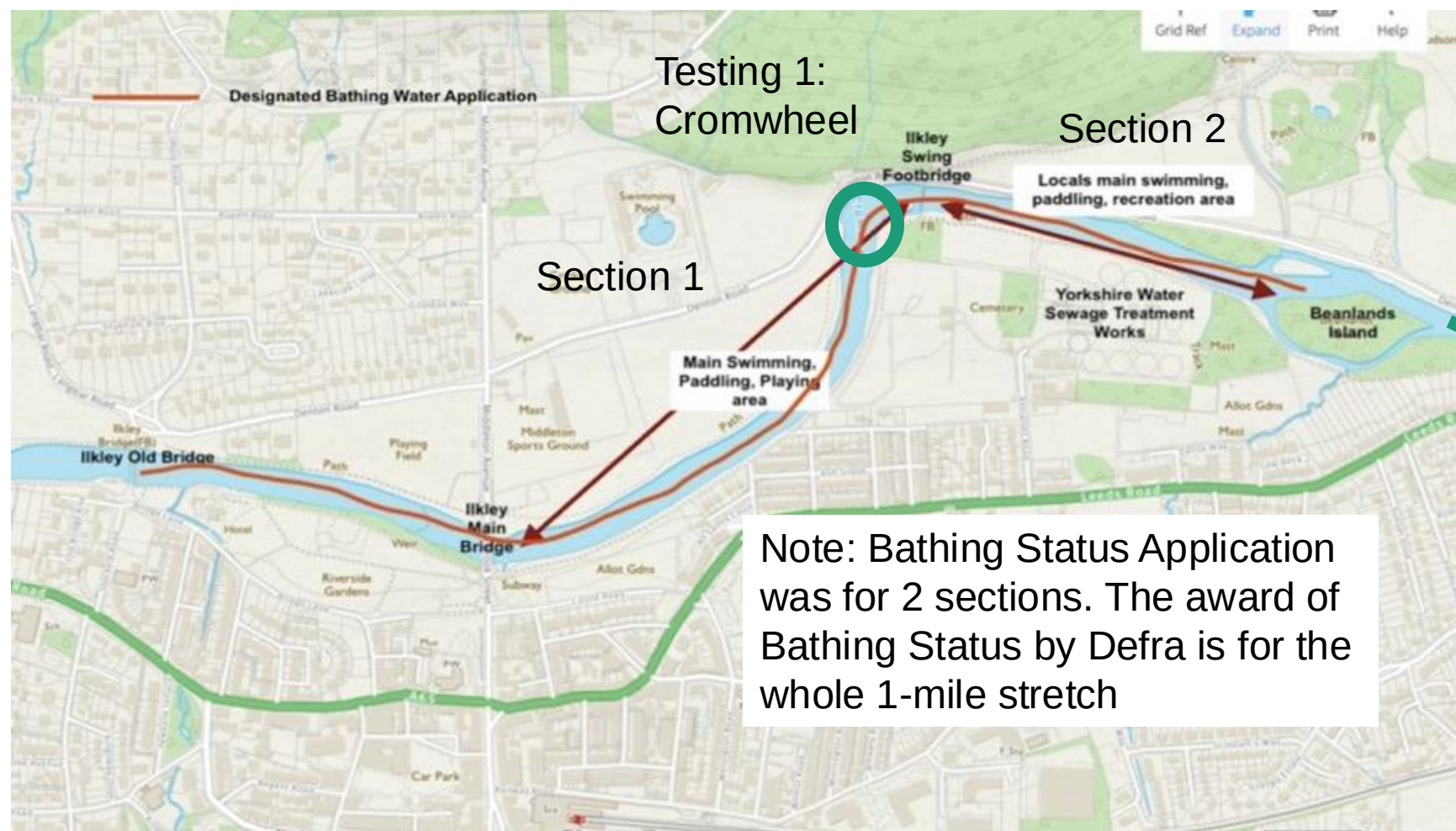
Ilkley Town Meeting last night heard the welcome news from Yorkshire Water that rather than wait 5 years to investigate the solutions for Ilkley, they will start this year, and then move to implementation directly. We heard Richard Emmott, Director of Corporate Affairs said:

"It would be daft for us not to investigate.", "Rivers are changing and we need to respond.", "There is a will to get it done."

Richard said it would take a couple of weeks to firm up their position. The ICRG have written to Richard today for a timeframe, and clarity about what they will do. See the video from the meeting.



Ilkley Bathing Designation



Testing 2: Stepping Stones below the designation.

Note the EA has always had (investigation) in its title for this site to make it clear it is not a classification point. Even though our application for designation was for the whole stretch, and our agreement (chaired by Ofwat) in June 2020 was that the whole stretch would be approached in the spirit of the application.

Timeline

2021

BATHING
STATUS YR
1

EA tests at Cromwheel – only one section of our application
Bathing Status First Year Count shows no additional visitors as a result of BS

Citizen Science Testing at Spicey Beck – to show source of pollution
Appear at Ofwat Board Seminar.
Appear at multiple agency Conferences

Jack and Patrick walk Ilkley to London Litter picking and fundraising for ICRG



GARDEN
ROUND
TABLE

Visit by Ofwat CEO and Chair, EA Chair.
Meeting between YW, Ofwat, EA, our MP, Town Council to agree way forward including upgrades to CSO in BS area

Agree Signage to go up warning of pollution (it didn't so ICRG put it up) Agreed to act across whole Bathing Application Area

Witness at Environment Audit Committee UK parliament to give evidence and submission

Ilkley River assessed as Poor Water Quality upstream of STW
EA promises a permit review by December (it never happens)

Environment Bill - our MP votes with the government and against our advice. We write to all MPs providing a briefing. Our MP stops communications with Ilkley Clean River Group and we have to write to Rebecca Pow to sort it out

Ilkley River Wharfe bathing site gets 'poor' water quality rating

© 19 January



River Wharfe at Ilkley: Bathing waters 'not tested in right place'

© 24 May 2021



The River Wharfe is a popular paddling and bathing site

Sewage will flow into Ilkley river until at least 2030, says government

Yorkshire campaigners dismayed at Environment Agency's reaction to evidence of waste discharged into River Wharfe



Swimming in sewage: Ilkley River Wharfe in Yorkshire is most polluted bathing site in England, data reveals

On sunny days, hundreds of people are known to swim in the popular river but samples collected by the Environment Agency found it regularly has dangerously high levels of bacteria



ILKLEY
CLEAN RIVER
GROUP

River Wharfe Suspension Bridge, Ilkley

Poor Water Quality
The most recent
classification is Poor,
based on samples
taken from 2021

+++ Excellent
++ Good
+ Satisfactory
- Poor



Bathing is
not advised



River Wharfe water quality below suspension bridge, Ilkley

The section of the river located downstream of the suspension bridge is currently **contaminated with sewage**, and Bathing Water compliance monitoring is not carried out along this section. This part of the river is located downstream of regular untreated discharges from Ilkley Sewage Treatment Works. **You are advised not to enter the river for any reason.**

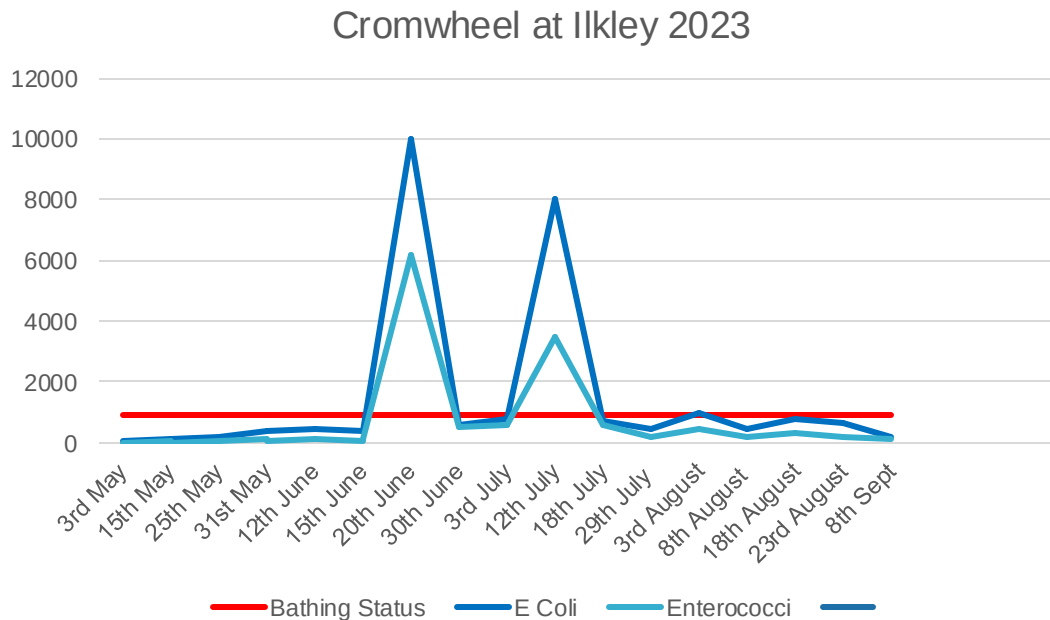
For more information the full details for this stretch of water, its catchment, information on all potential pollution sources and how they are managed can be viewed on the environment agency website or by scanning this QR code.

<https://environment.data.gov.uk/bwq/profiles/profile.html?site=uka1200-08901>



Bathing Status Data 2023

Wharfe at Ilkley Bathing Status Section One
Main Bridge to the Swing Bridge
'Cromwheel' testing site

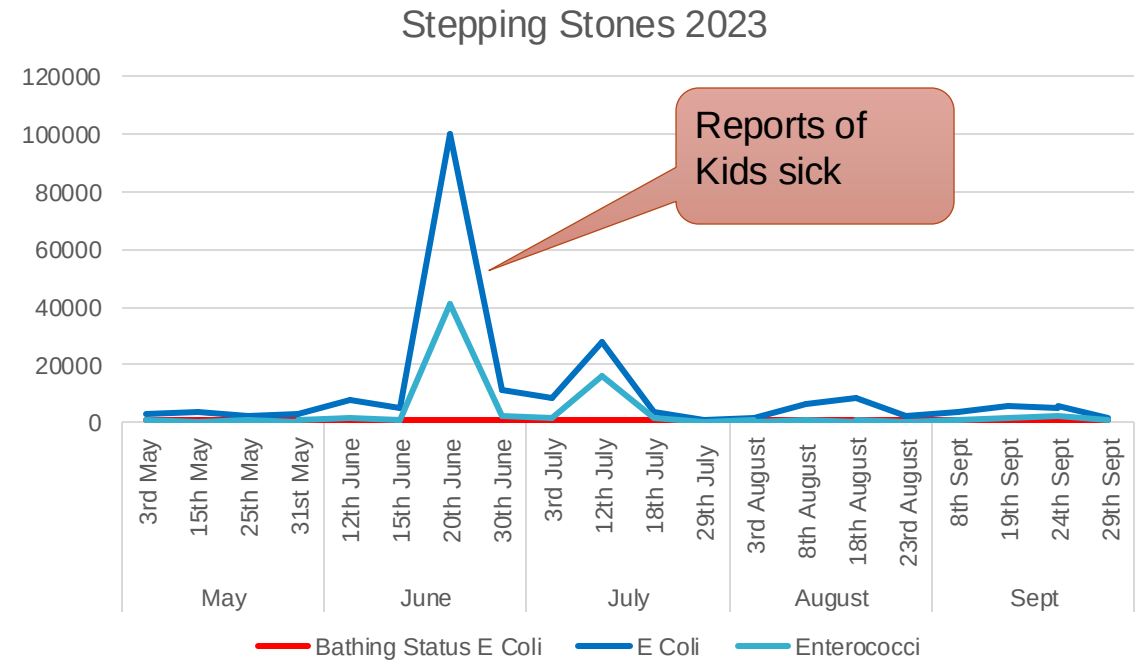


Note scale to 12,000

Section 1 data (Cromwheel)

https://environment.data.gov.uk/doc/bathing-water-quality/in-season/bathing-water/uke4100-08901.html?_page=4

Wharfe at Ilkley Bathing Status Section Two
Swing Bridge to Beanlands Island 'Stepping Stones' testing site



Note scale to 120,000

Section 2 data for

Beanlands https://environment.data.gov.uk/bwq/profiles/profile.html?_search=Ilkley&site=uke4100-08902

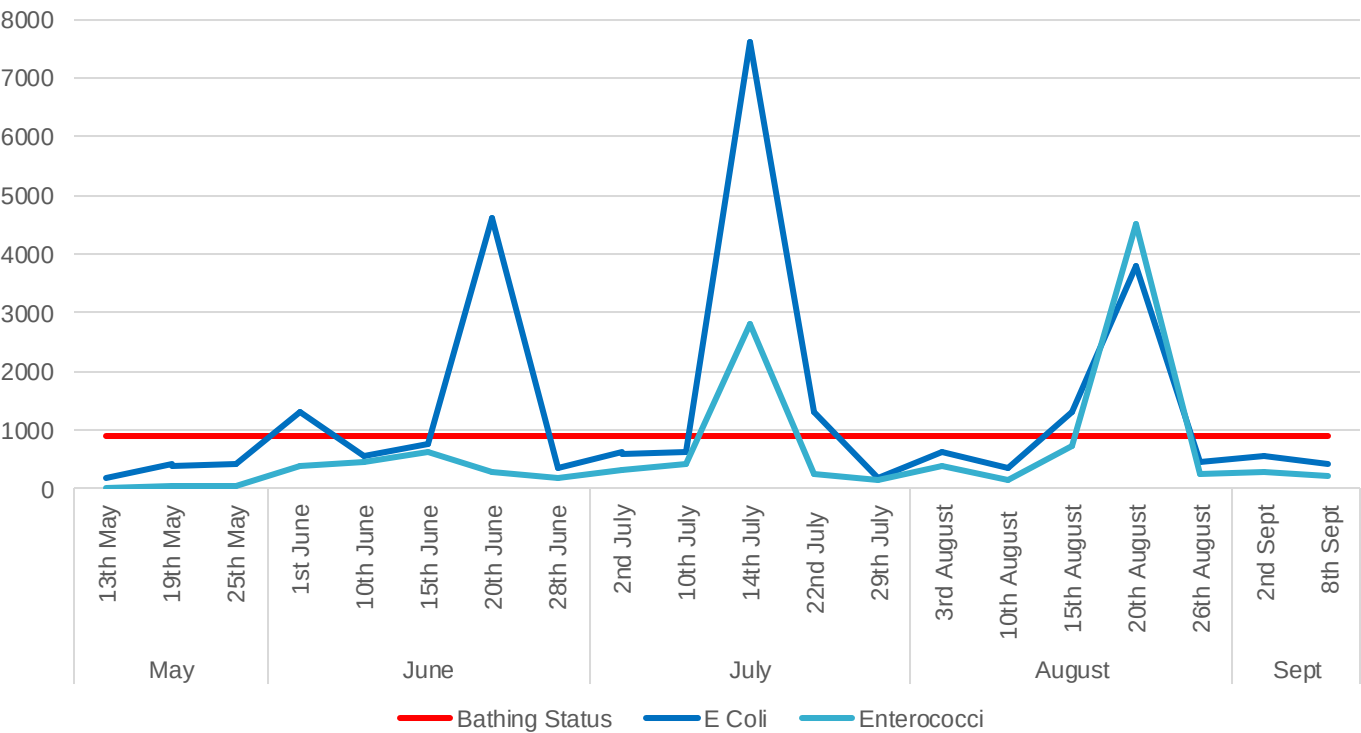
Note Sufficient water quality for paddling, playing and swimming id 900cfus (red line on graphs)

Bathing Status Data 2024

Wharfe at Ilkley Bathing Status Section One
Main Bridge to the Swing Bridge
'Cromwheel' testing site

Wharfe at Ilkley Bathing Status Section Two
Swing Bridge to Beanlands Island '-
Stepping Stones' testing site

Not measured or reported in 2024



Note scale to 8,000

Note Sufficient water quality for paddling, playing and swimming id 900cfus (red line on graphs)

Testing along the whole Wharfe

Thanks to Ilkley Clean River Group, Addingham Environment Group, Yorkshire Dales Rivers Trust and Henderson Ecology



Images: Ben Statham

Local to National

2023

Work starts on the 'super sewer' for Ilkley to clean up the upstream section of the bathing site.

Our Troubled River Documentary features the Ilkley campaign

Application goes in in March 2023 for Ofwat accelerator to secure no more than 10 sewage discharges into the bathing site. In principle this is approved at £71M upgrade of STW at Ilkley and storage capacity at Addingham

Philanthropic funding secured to support campaign groups nationally with the costs of lab testing. All groups use the ICRG water testing protocol and are supported by ICRG in terms of their strategy

Public Declaration published with a coalition of leading campaign groups

FOIs submitted on behalf of all failed applicants for bathing Status to secure better guidance and clarity of decision-making from Defra

Member of the group are receiving national awards for their work leading the river campaign.

Defra issues new BS guidance. At last the threshold is known

100+ local campaign groups are now being supported by ICRG in collaboration with Wild Fish, Windrush Against Sewage, Save Windermere, Whitstable SOS, Surfers against sewage, River Action

Multiple Universities now working with us to test the source of and impact of pollution in the Wharfe - microplastics, nutrients and impact of treated sewage

Yorkshire Water boss apologises over sewage being pumped into rivers

18th May

ENVIRONMENT ILKLEY

Environment

Paul Whitehouse 'angry' with sewage pollution in Yorkshire river popular with swimmers

Yorkshire Water said it is working to reduce the amount of sewage that is pumped into the River Wharfe, after it was criticised during a BBC documentary.



By Nathan Hyde

Published 6th Mar 2023, 15:39 BST



New sewer to halve river discharges, Yorkshire Water says

12 April



A remote-controlled tunnelling machine is being used to lay a new 3000 (2,624ft) sewer under the A63 in Ilkley

Second phase of new Ilkley sewer begins



Public Declaration for Rivers and Seas

Our rivers and seas are open sewers.

We care deeply about our rivers and seas.

Water companies must comply with, and regulators must regulate according to the 1991 Water Industry Act and the 1994 Urban Waste Water Treatment Regulations which require all sewage to be treated, and for storm overflows (which discharge raw rate in truly exceptional

Our Declaration

Our rivers and seas should be protected for nature, for ourselves and for future generations.

This is our declaration:

- Stop pollution for profit.
- Make our waters healthy and safe again.
- Action now not targets sometime.
- Regulation that protects the victims, not the polluters.
- Now it's time for the polluters to pay

Environment Audit Committee 2021

Defra Webinar on Bathing Status Policy for Rivers



Environmental Audit Committee ✓ @CommonsEAC · Apr 21, 2021 ...

Replying to @CommonsEAC

Prof Becky Malby: "A spillage is what you do with a cup of tea. Not when you discharge raw sewage for days and days and days. The language used tone it down."

watch live at bit.ly/32vkGXg |
[#waterquality](#) [#rivers](#)



You and Becky Malby

Supporting 100 local campaign groups testing and applying for bathing Status

Working in a national coalition with the key campaign organisations and groups

Awarded Funding from Esmée Fairburn Foundation to pay for media training for campaign groups across the UK



What We Have Achieved

National Network of Campaign Groups all calling for the same change



Public Declaration for Rivers and Seas

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Water companies must comply with, and regulators must regulate according to the 1991 Water Industry Act and the 1994 Urban Waste Water Treatment Regulations which require all sewage to be treated, and for storm overflows (which discharge raw sewage) to only operate in truly exceptional circumstances.

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What We Have Achieved

Citizen Science



Citizen Science Protocol for River water testing (EA approved)

Full picture of water quality at Ilkley and first whole river source to end water testing.

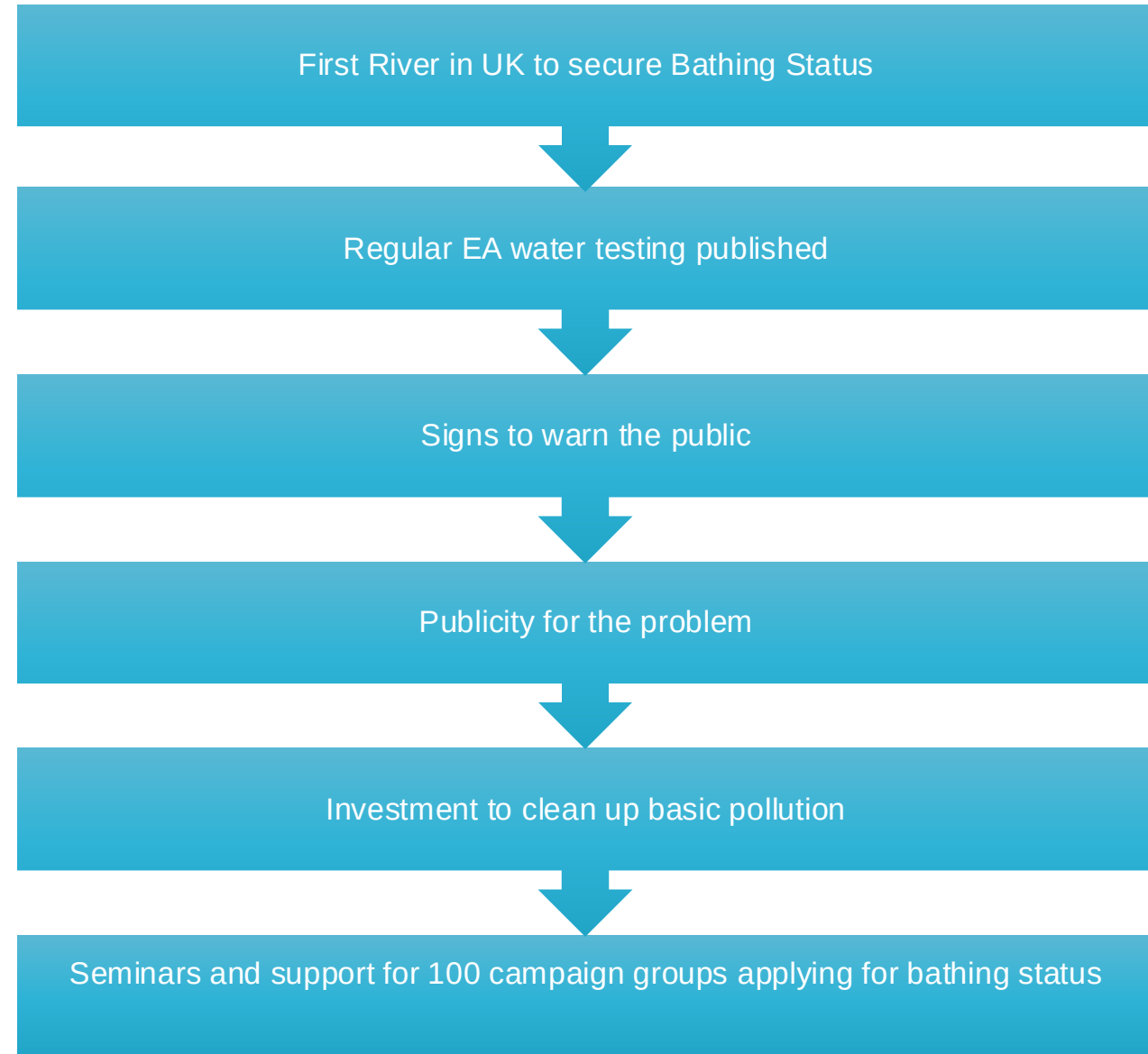
Citizen led investigation of pollution sources to drive the solutions at Ilkley

Supporting campaign groups with testing and securing funding for 10 new campaigns

The most tested river in England with multiple University projects now in progress from microplastics to nutrients

What we have achieved

Bathing Status

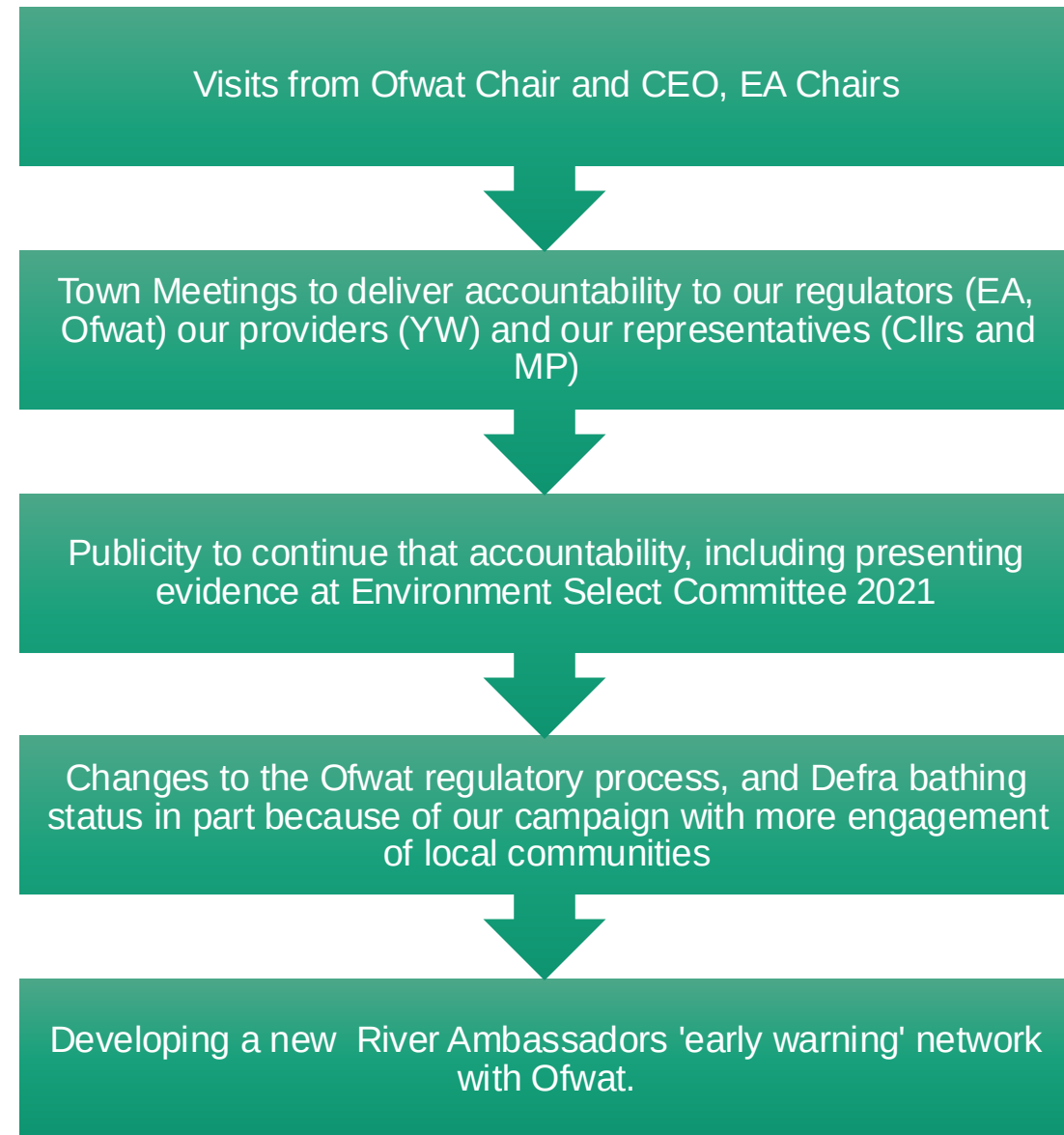


What we have achieved

Accountability



Owen Wells, telling the Ofwat delegation about the FoIM modifications to Ilkley Tarn



What we have achieved

Solutions!

Yorkshire Water outlines £13m infrastructure investment to improve River Wharfe



£11 M Investment from Yorkshire Water to clean up upstream of the STW



Proposals to upgrade the STW to clean up the river at Ilkley and downstream at circa £60+M now being progressed through Ofwat Accelerator – spades in ground 2026

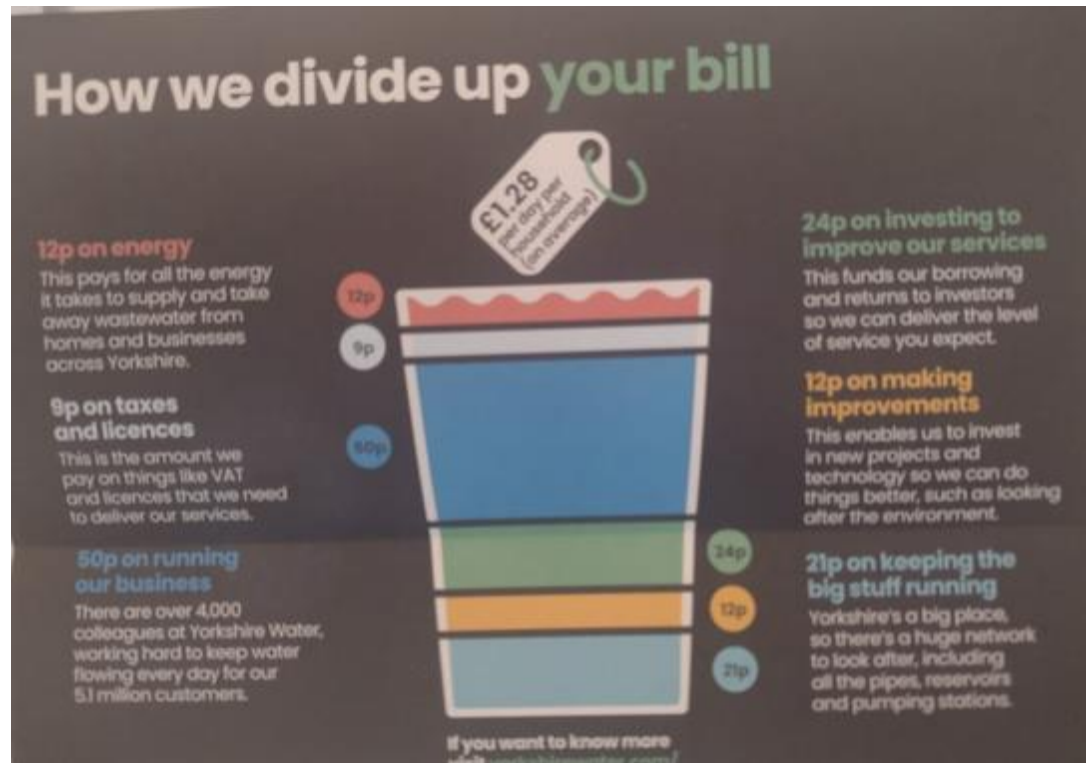
Though we are concerned about Yorkshire Water's view that the customer pays!

Storm overflow diversion and storage from Rivadale CSO being constructed



Who Pays?

David Black, the CEO of Ofwat, has visited Ilkley and has written to us assuring us that we won't pay twice. Just under 19% of our bill payments go to servicing debt



BUT.... Proposed Bill Increases (PR24)

By 2030 Ofwat has proposed bills will be £537 an increase of £107pa = £9pm a total of 36% BEFORE inflation

Debt repayment in our bills will be £193 a yea

Yorkshire Water serves 2.3M households. That proposed price increase delivers an extra £2.46 Billion per annum by 2030.

Our bill increase is to service debt rather than pay for services.

We also note that Ofwat has identified that between 2020 and 2022 Yorkshire Water only spent 20% of their wastewater enhancement allowance.

Yorkshire Water

**Adam Ashman, Head of Strategic
Planning at Yorkshire Water**



YorkshireWater

An aerial photograph of a wetland restoration project. A winding path or road cuts through a lush green landscape. The path is flanked by dense trees and vegetation. In the center, there is a large, irregularly shaped wetland area with various types of plants, including tall reeds and grasses. The water in the wetland is dark, and the surrounding land is a vibrant green. The overall scene is a harmonious blend of nature and human-made infrastructure.

**Developing a solution that
delivers today and protects
the future**

The challenge

- Improve the environment
- Customer bills and cost
- The technical challenge



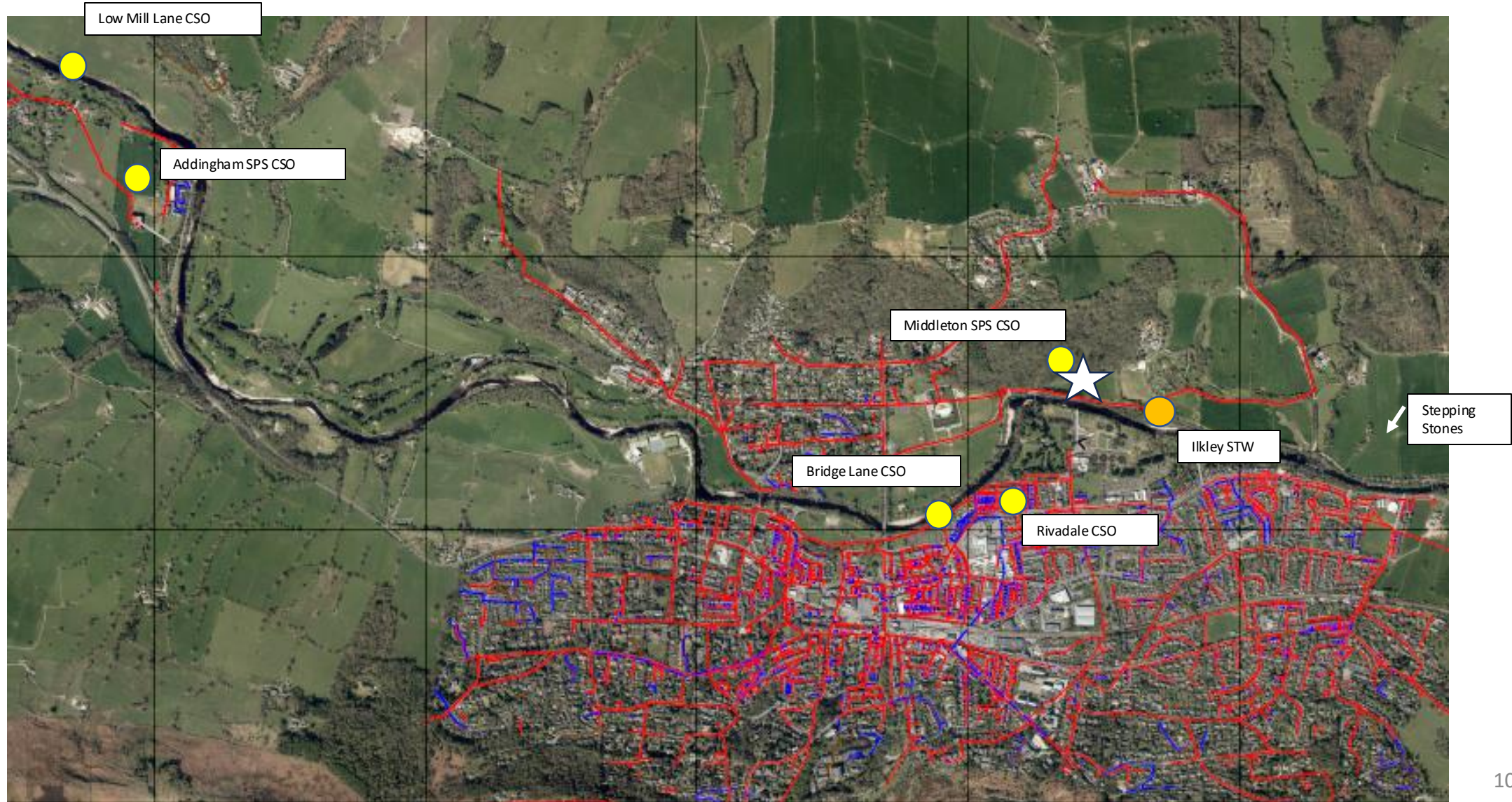
Necessitates a change in approach

The River Wharfe at Cromwheel, Ilkley was designated as UK's first riverine bathing water in December 2020.

- Embracing the uncertainty
- New solutions to deliver better outcomes
- Creating the conditions for collaborative success



Improvement works across Ilkley



Proposed Scheme

- All storm overflows (5km upstream plus 2 downstream within recreational reach) will meet Storm Overflow Discharge Reduction Plan requirements (spill frequency and screening).
- FFT increased via Aerated horizontal sub-surface flow rush bed to allow additional stored flows to be treated.
- Tertiary treatment via Integrated Constructed Wetland.
- Relocation of final effluent discharge point to remove from recreational reach and protect public health.

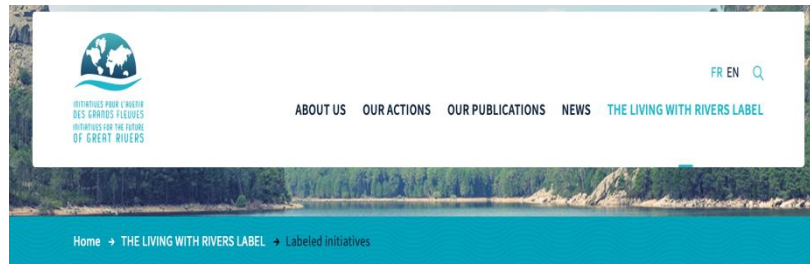




Stories from other campaigns.

Prof Frances Cleaver, Lancaster Environment Centre, University of Lancaster

Many stories of award winning campaigns from around the world....



Labeled initiatives



Rios Online

26 July 2024 → Education & awareness
→ Research & technologies → Amazon

The Rios Online project is a citizen science initiative created to establish a relationship between local residents and academics in the Amazon. This relationship creates a synergy that helps both actors learn to be resilient in the face of the real-life scenario of extreme hydroclimatic events, such as the one that occurred in 2023. A [...]



Travelling water exhibition

26 July 2024 → Culture & leisure
→ Rivière du Nord

The Fondation Rivières project involves developing an artistic and cultural canoe-route on the Rivière du Nord, with works of art accessible mainly from the water (canoe, kayak, pedalo, paddleboard, electric boat) and sometimes from the banks. Various routes are possible to showcase the history of local communities. The Rivière du Nord is one of the [...]



Improving protection of the Nyabarongo river watershed

26 July 2024 → Agriculture & biodiversity
→ Health & pollution control → Nyabarongo

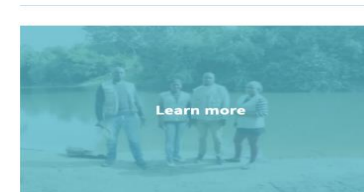
Project objectives of the Women for Water and Climate Cooperation Network (WWCCN) : Strengthen the protection of the Nyabarongo river watershed to : Save the endangered Nyabarongo River Community livelihood resilience Biodiversity conservation. Forests are known as natural filters and purifiers of water and ecosystem greening: by planting agroforestry trees and reforesting the Nyabarongo watershed [...]



Production and distribution of a game about the River Niger for schools in the four countries through which the river flows

26 July 2024 → Education & awareness
→ Niger river

"Au fil du Fleuve Niger" is a game developed by the Karama association, which provides schooling for children living on the islands and banks of the River Niger in Bamako, and works to promote sustainable environmental management in Mali. It is intended for all adults, teachers and organizers wishing to raise young people's awareness of [...]



Capacity-building for farmers in the Tènè and Dombèlè river basins, tributaries of the Bafing river

26 July 2024 → Agriculture & biodiversity
→ Bafing

The AGUIPSE association is proposing a program to restore the resource through various levers: Preservation of the Baffing springs (Fouta Djallon) Support for changes in agricultural practices and multi-actor IWRM. Capacity-building for farmers, market gardeners, nursery gardeners and cattle and small ruminant breeders in the Tènè and Dombèlè river basins, tributaries of the Bafing river. [...]



Project to support concerted management of the Congo River maritime reach

26 July 2024 → Cooperation & governance
→ Congo

The project to support concerted management of the marine reach is part of the IDEL association's program for the Protection and Preservation of Marine Ecosystems, and is in line with the goal of achieving MDG 14. The project aims to ensure responsible, respectful and sustainable use by all stakeholders in the area (oil companies, fishermen, [...])

<https://www.initiativesfleuves.org/label-living-with-rivers/initiatives-labellisees/?continent=europe>

Engaging water citizens: the potential for reshaping water



governance

Workshop Introduction



Problems of water insecurity (floods, droughts, pollution, depletion and degradation, lack of access), once considered to be symptoms of underdevelopment in the global south, increasingly affect countries of the global north. Mainstream 'techno-managerial' models of water governance, delivered through state departments or private companies, are proving insufficient to address these challenges and often fail to engage with water users and communities in meaningful ways. In response to these growing insecurities, citizens' initiatives are emerging across Europe to address water concerns.

In this workshop we explore the potential of citizens' initiatives in Europe to reshape water governance. To do this we learn from the experience of local citizens' initiatives in Montpellier (France) and Ilkley (UK), analysing them as emergent institutions of collective action, mediating people-environment interactions, and reshaping citizen-state relations. We aim to better understand how people become engaged with water issues, how citizen-led institutions emerge and evolve, what kind of environmental and social impacts they generate, and how these processes can be supported and facilitated.

In the workshop we will also experiment with 'reversing the gaze': adapting knowledge and approaches generated in the global south, to the study of citizen initiatives in the global north. By undertaking joint learning with the citizen initiatives, we aim to creatively bridge boundaries between different contexts; between researchers, citizens' and water professionals; between scientific and lay knowledge.

Drawing on my interest in institutions and how they evolve I will briefly reflect on three issues:

- The focus of campaigns
- Expanding the mission from river clean-ups to wider social and environmental issues
- The role of culture, imagination and joy!

The focus of campaigns ?



Sentinelles de Rivières



Community Association transformed into a
Collective Interest Cooperative
Society (S.C.I.C.)

2009 Ad hoc community association coordinating occasional public clean-up facilities on the River Lez

.....

2024 A formalised organisation with 3 employees, contract with local authority to maintain part of the river catchment, and to train unemployed people in environmental skills



Missions



- Act on river pollution to reduce its impact on the Mediterranean
- Promote social integration by training and supporting long term unemployed/people on community service
- Work on pollution beyond the river aiming to eradicate illegal dumping and landfill sites





The river is on strike

After the drought of summer 2022, the Montpellier Metropolitan Council (France) received a anonymous letter

In this letter the Lez river declared its intention to go on strike.

Addressed to all humans who drink the waters of the Lez, the letter listed numerous grievances – humans have segmented and fragmented the river, filled it with rubbish, pollution and nitrates.

The letter asks in despair how have we arrived at this. How have humans so lost touch with the river?

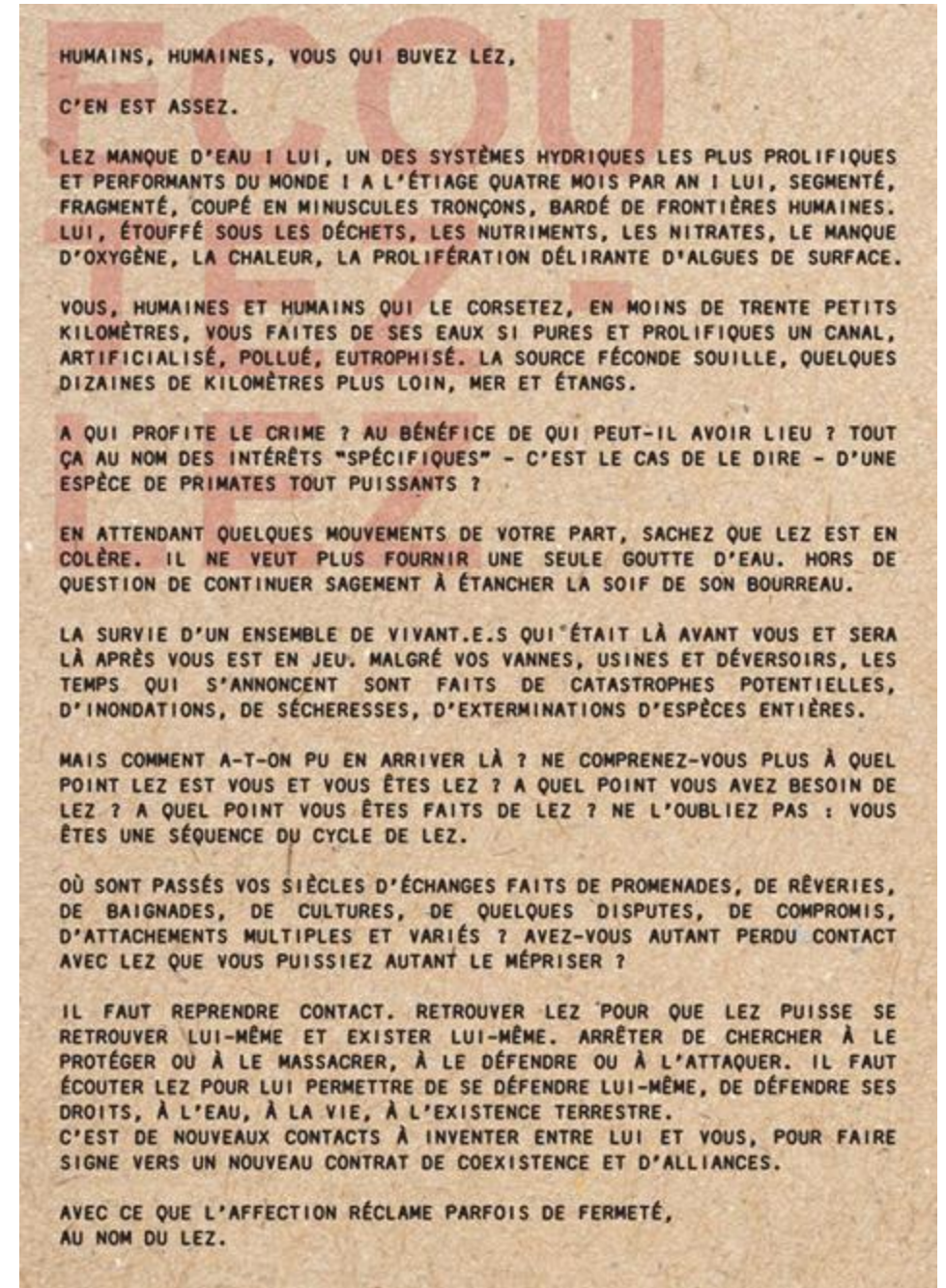
Listen to the Lez!

It's time for a new contract between the river and humans – a new contract of co-existence and alliances

Signed – in the name of the Lez

Source: Bipolar – art territoire

<https://www.bipolar-production.com/rassemblez-lez>



parlement de loire

Et si un fleuve avait la possibilité de s'exprimer et de défendre ses intérêts ? Face aux alertes environnementales, il est urgent de changer de regard.



le collectif "vers un parlement de loire"

En 2023, un collectif appelé "Vers un parlement de Loire"
se forme pour ouvrir, amplifier et étendre cette démarche
à l'ensemble du bassin versant de la Loire.





Session 3: Campaigning for Change

Chair: Prof Becky Malby



ILKLEY
CLEAN RIVER
GROUP

Citizen Science as Evidence

Sheila Adam, Clean River Kent



ILKLEY
CLEAN RIVER
GROUP

Clean River Kent Campaign

Using data to deliver agencies responsibility to them -
making the problem impossible to ignore, deny and walk
away from

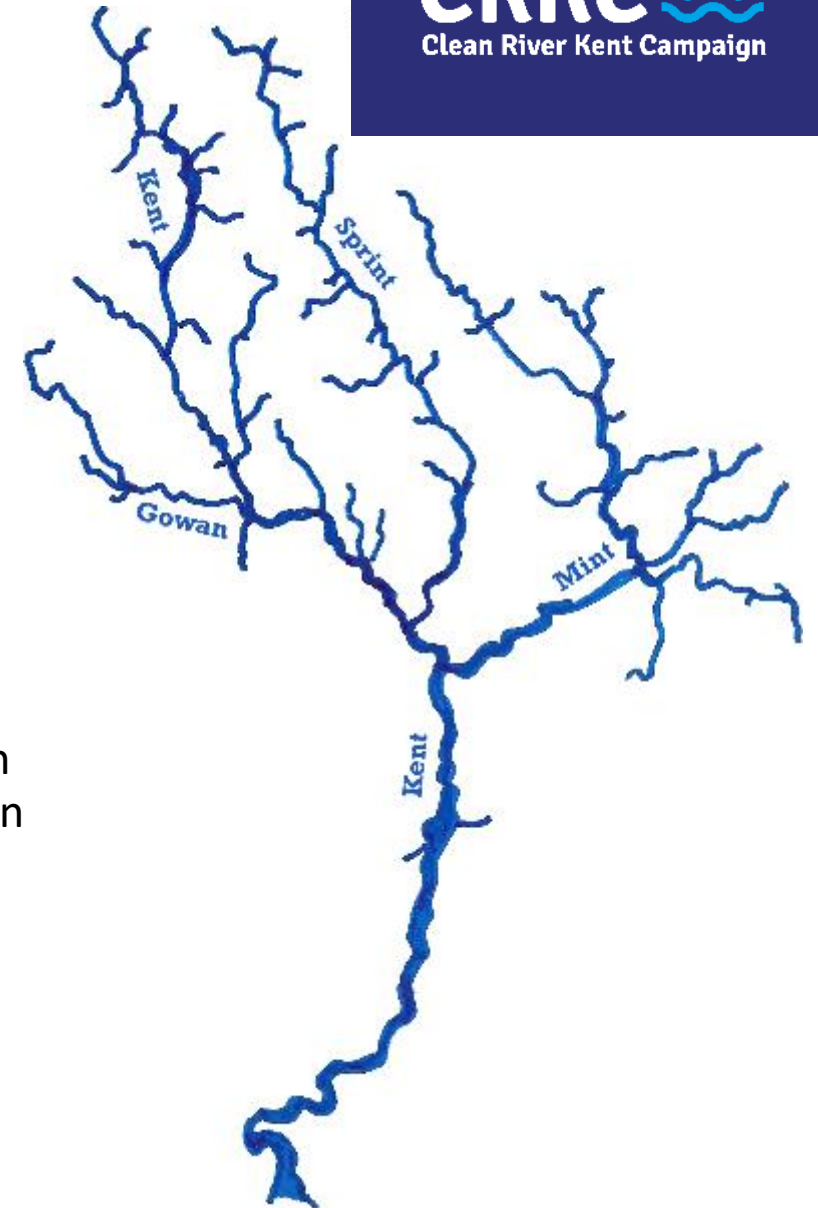
Sunday 22nd September 2024

With many thanks to all our dedicated CRKC volunteers

Sheila Adam

Background – the river Kent

- The river Kent is in South Cumbria, rising in the Kentmere valley and flowing through Kendal down to Morecambe Bay
- It is a beautiful upland river, popular with anglers and kayakers as well as with swimmers and walkers
- The river Kent is designated an SSSI and SAC with three animal and one plant species recognised – bullhead, freshwater pearl mussels, white clawed crayfish, and river water crowfoot
- The Clean River Kent Campaign (CRKC) was established in Autumn 2021 following a major fish kill in Kendal, and increasing concerns about sewage backing up in the streets of Staveley when it rained
- The most recent EA data show that in 2023 there were 283 “sewage spills”, with a duration of 4846 hours (55% of the total hours in the year), even worse than in 2022!



CRKC 
Clean River Kent Campaign

The CRKC Citizen Science programme



1 Measuring E. coli (2021) – University of Cumbria degree thesis

- Sampled above and below WwTW – E.coli high below Staveley WwTW.

2 Measuring faecal bacteria (Feb – Sep 2022)

- Sampled at 6 locations along river length to measure the levels of faecal pathogens
- At each location we found that the levels of E.coli and Enterococcus spp were such that the EA would have classified the quality of the water as “Inadequate”, the worst category set out in the Water Framework Directive
- Paper published on CRKC website.

3 Measuring nitrates and phosphates & assessing ecology (Sep 2023 – present)

- A 12 month study within the Freshwater Watch framework measuring levels of nitrates and phosphates at 23 locations on the river Kent and its main tributaries – the Gowan, the Mint and the Sprint – the 12 months will be completed in September 2024
- Also measuring turbidity and making systematic observations at each location
- Currently analysing the data and may continue the testing at a smaller number of locations where either results have raised concerns or where we wish to continue monitoring eg around WwTWs



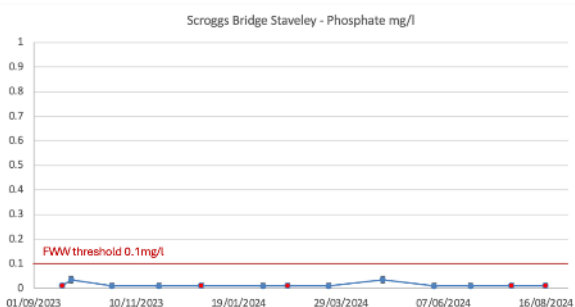
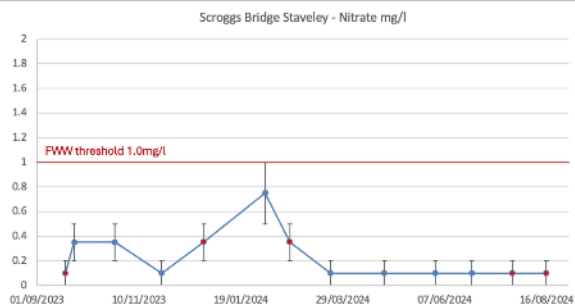


13 samples, 20 Sep 23 – 15 Aug 24

- Upland river, trees and shrubs
- Livestock in fenced fields
- Occasional foam on water, no algae, no litter
- Dragonflies, damselflies, river fly larvae and white clawed crayfish
- Urban road and agricultural run off
- River high and surging on 3 occasions

Nitrates always below FWW threshold

Phosphates always below FWW threshold



Red points indicate sampling preceded by heavy prolonged rain

Examples:

Freshwater Watch reports from 12-month study (Sept 23 – Aug 24)



9 samples, 11 Oct 23 – 29 July 24

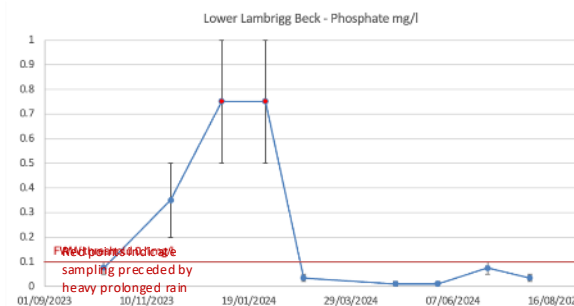
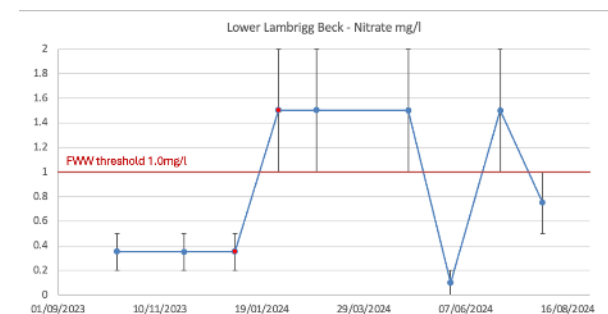
- Below Grayrigg WwTW above confluence with river Mint UU has flagged requirement to reduce phosphorus below Grayrigg WwTW
- Trees, shrubs, grass, small plants, bare soil, concrete and impermeable surface
- Livestock
- Foam on 4 occasions, floating algae once
- Agricultural run off
- Public use of riverbank
- Aquatic birds, mammals and plants

Nitrates >1.0 mg/l:

- 30 Jan 24 – heavy prolonged rain, river level high and water flow surging
- 25 Feb 24 – no rain, river level average and water flow steady
- 28 Apr 24 – no rain, river level low and water flow steady
- 30 Jun 24 – light showers, river level low and water flow slow

Phosphates >0.1 mg/l:

- 26 Nov 23 – no rain, river level low and water steady
- 31 Dec 23 – heavy, prolonged rain, river level high and water flow surging
- 30 Jan 24 – heavy prolonged rain, river level high and water flow surging



Red points indicate sampling preceded by heavy prolonged rain

The CRKC Citizen Science programme



4 Assessing the sources of faecal bacteria – human/ruminants (May – Dec 2024)

- In collaboration with the University of Sheffield – microbial source tracking (MST) to understand better the sources of the E. coli in river
- The DNA of the river water E. coli will be analysed using a PCR technique to attribute the DNA to either humans or other animals eg sheep or cows
- This study will use "torpedoes" for the first time in the UK
- The results should be available by December 2024 and will be published in a scientific journal.

5 Sewage discharge monitoring – Staveley WwTW (Feb 2022 – Mar 2023)

- CRKC supported Staveley with Ings Parish Council in monitoring the frequency of sewage discharges at Staveley WwTW
- Sewage was discharged on 1 in every 2 days during this period
- By using complementary available data eg rainfall and river height, CRKC volunteers developed a model which United Utilities accepted as indicating the extent of groundwater ingress.

6 CRKC interactive map of the river Kent (2022 – present)

- CRKC results compiled together with other available data into online, interactive map of the river Kent and tributaries
- This is enabling us to identify hot spots, where further action is indicated.



DNA work



CRKC 
Clean River Kent Campaign

 **University of
Sheffield**



Funded by:

Woodleigh Impact



Using our CRKC citizen science

- All CRKC citizen science is funded through grants from disinterested organisations eg charitable trusts, local councils, Woodleigh Impact and the Patagonia Foundation – specifically no funding from United Utilities or EA or South Cumbria Rivers Trust – and we have taken expert advice on study design and analysis
- CRKC has established its credibility by publishing the methodology and results on the CRKC website, promulgating our conclusions via e-comms (and press releases where appropriate), and discussing the results in public meetings
- CRKC has responded promptly to media requests and established effective networks with coverage by local, regional and national media
- CRKC has begun to make more effective use of existing, but previously unused, data including rainfall and river gauge data to model Staveley sewage system
- CRKC campaigned with the local Parish Council for “Clean Water, Clean Streets” – no more sewage discharges into the river Kent and no more sewage in Staveley streets
 - ❖ Louise Beardmore, CEO of United Utilities, attended a community meeting in Staveley on 31 Jan 2024 following a CRKC petition signed by >350 people
 - ❖ AMP8 investment secured for an integrated plan for Staveley WwTW and combined sewer system through Staveley village
 - ❖ AMP8 investment also secured for 3 further locations on the river Kent/tributaries
 - ❖ Bimonthly meetings (Mar, Jun, Aug, Oct 2024 so far) between delivery agencies (UU, EA, W&F Council and LDNP) with CRKC and Parish Council to maintain progress – further community-wide discussion in January to discuss preferred option.



Other key CRKC achievements

- Recruited and sustained 150 + volunteers enabling CRKC to develop broader actions and themes including:
 - A new campaign to reduce pollution from household products and off-mains sewage treatment
 - A programme to explore the emotional connections for local people with the river Kent
- Kent Working Group – Kent CAbA partnership
 - Creation stimulated by CRKC
 - For all its imperfections it should have potential
- Achieved effective communication channels with United Utilities whilst maintaining CRKC independence and right to challenge them to go faster and further
- Established local alliances eg:
 - Funders including range of local councils
 - With Natural Kendal/W&F Council to create a possible blue/green space at Sandy Bottoms
- CRKC is regarded as a credible player in a complex environment.



What we have learned

- CRKC has engaged around 50 volunteers in active citizen science – our experience is that many volunteers seem to prefer collecting river water samples to answering emails or writing minutes!
- The citizen science programme has been a good way of getting attention and then sustaining interest in the local community, with partners and the media
- It has been crucial to source funding from those who don't have skin directly in the game – the results and the conclusions are ours
- The citizen science programme must prioritise studies which will drive the campaign eg we started with faecal bacteria in order to demonstrate the risks which the river Kent poses to children and families; and the modelling work in Staveley built CRKC credibility with United Utilities engineers and modellers
- We are learning to use existing data to complement CRKC data – although this is very much a work in progress
- Do everything you can to look after your volunteers!



P.S.....One more thing!

Calling other upland rivers and rivers where there are never 100 people swimming at any time



THANK YOU FOR LISTENING!



www.sustainablestaveley.org.uk/current-projects/clean-river-kent-campaign/

Bathing Status as Strategy

Kirsty Davies, Surfers Against Sewage



ILKLEY
CLEAN RIVER
GROUP



**SURFERS[®]
AGAINST
SEWAGE**

Why Bathing water status?

Legislation

Bathing Water Regulations



Monitoring

Only stretches of waterway
that are monitored regularly
for bacteria harmful
to human health



transparency

Publish water quality information



Address sources of pollution

‘Prevent, reduce or eliminate the causes of pollution’



bathing status
as a driver to create
change

Responsibility



Obligation



Accountability



Demand Change



Bathing water regulations reform

- Recreational Waters
- Extend bathing season
- Extend monitoring to include other pollutants, include real-time
- Overhaul de-designation process
- End dis-regarding samples
- Adjust minimum number of water users
- Include events when evidencing the number of water users
- Revise approach to facilities

Running a Successful Campaign

Matt Staniek, Save Windermere



Four Pillars of Campaigning

01

Awareness
and Media

02

Investigations,
Science and
Research

03

Legal
Avenues

04

Political Action



What is legal? Getting clear on 'exceptional' circumstances

Nick Measham, Wild Fish



ILKLEY
CLEAN RIVER
GROUP

Working to protect wild fish

Tackling water company pollution

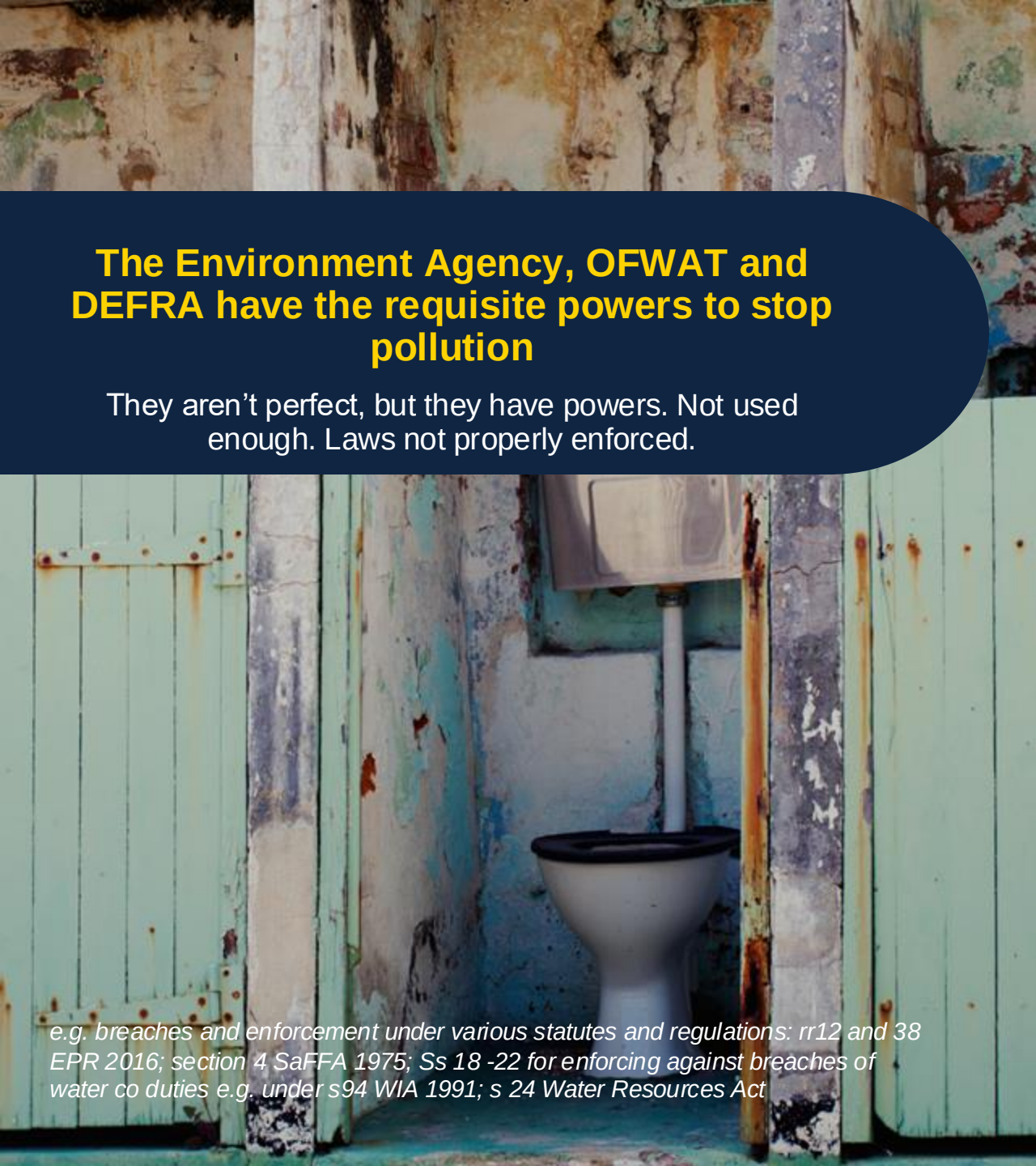
The 15-minute argument for getting the regulators to work for the environment without adding excessively to the statute book. . .

Nick Measham

CEO

nick@wildfish.org

WildFish.



The Environment Agency, OFWAT and DEFRA have the requisite powers to stop pollution

They aren't perfect, but they have powers. Not used enough. Laws not properly enforced.

e.g. breaches and enforcement under various statutes and regulations: rr12 and 38 EPR 2016; section 4 SaFFA 1975; Ss 18 -22 for enforcing against breaches of water co duties e.g. under s94 WIA 1991; s 24 Water Resources Act

Getting the regulators to do their jobs

- New environmental laws and long inquiries and consultations, by and large, not necessary.
- Danger is that we simply repeat what we already have and cause delay.
- Existing environmental laws can largely get the job done if applied correctly.
- The regulators are broken by irrelevant growth and business duties, contradictory guidance and a lack of will, funding and proper management.



A man cannot serve two masters....

Contradictory and mutually exclusive duties towards the environment and economic growth

- Legislative and Regulatory Reform Act 2006. Section 21 and 'proportionality'
- Regulatory Enforcement and Sanctions Act 2008. Civil sanctions such as enforcement undertakings
- Regulators' Code 2014 – growth and economic impact of regulation
- Section 108 Deregulation Act 2015 and the guidance issued under the Act (economic growth)
- Enforcement and Prosecution Policy (impact on economic growth)



Underfunding and poor management

- EA's overall budget has shrunk. It should be increased
- EA doesn't charge or charge enough from those it regulates. This needs to change to fall in line with polluter pays principle.
- EA staff numbers should increase. Particularly fisheries specialists - we don't need more managers with stupid titles to suit corporate organograms.



Operator self-monitoring

- 2009 - operator self-monitoring (OSM) opened the door for cheats...
- New Government wants to increase 'audit' inspection. We say get rid of it entirely and make the water companies pay for continuous remote monitoring by the regulator
- Amend permits to replace the 5% failure Look-Up Tables routine monitoring regime (it is out-dated and non-routine, operational monitoring data is ignored)



The way forward

- Amend rules, codes and guidance to give EA and Ofwat freedom to do their job
- Disapply the Regulators' Code
- Disapply section 108 of Deregulation Act 2015
- Revise the EA's Enforcement and Sanctions Policy
- Provide sufficient funding for regulators - sufficient charging of those regulated
- Scrap operator self-monitoring
- Require frequent inspections and continuous monitoring
- Require full and real-time publication of data
- Review and amend all permits to drive and not follow investment

22/09/2024

Cleaning up our rivers, lakes and seas conference

Thank you!

Any questions?

Nick Measham

CEO

nick@wildfish.org

WildFish.

Session 4: Question Time

Chair: Di Lury, Ilkley Clean River Group

Our Panel:

Jo Bradley, Stormwater Shepherds;

Dr Andrew Singer, Pollution Scientist;

Matt Staniek, Save Windermere

WITHDRAWN Helen Wakeham, Director of Water at the EA

James Wallace, CEO River Action

What Now – how do we mobilise together to secure clean rivers lakes and seas?

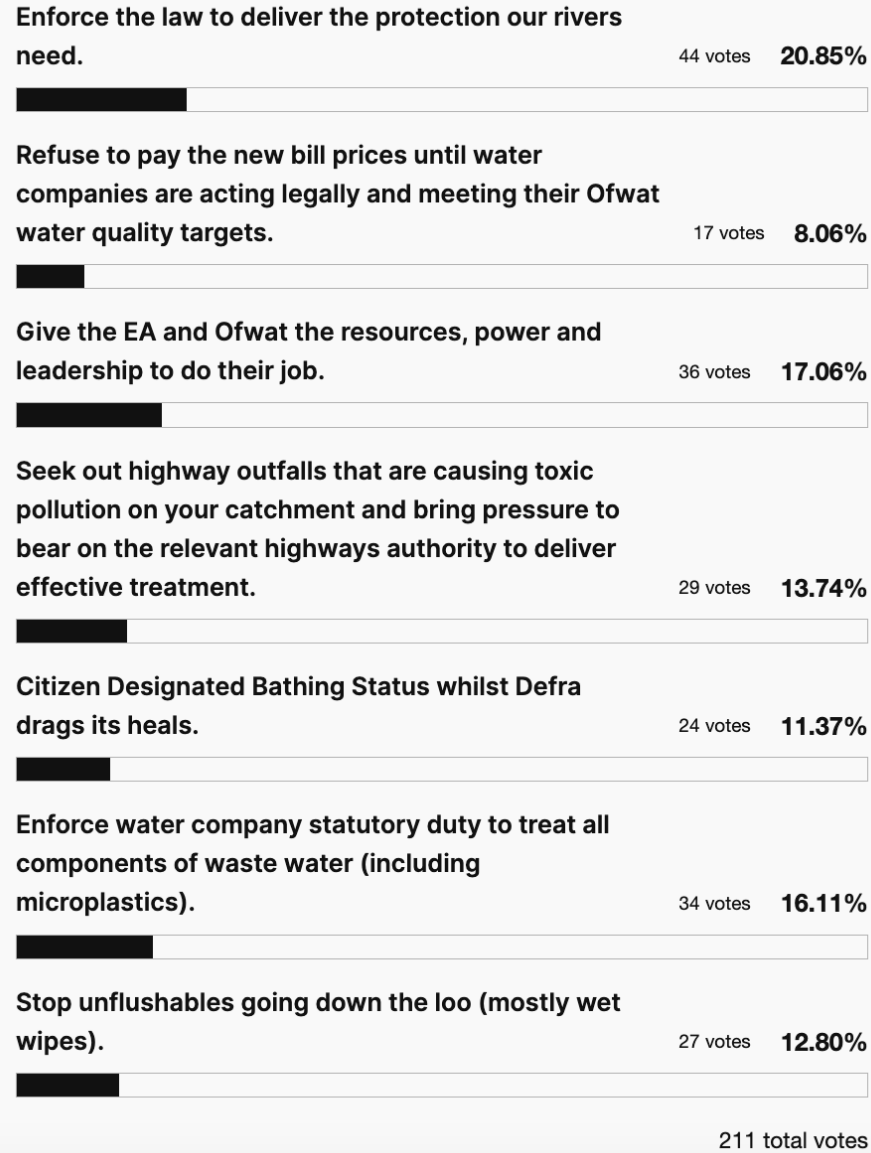
Chair: Prof Malby

Soapbox

1. Enforce the law to deliver the protection our rivers need. Nick Measham
2. Refuse to pay the new bill prices until water companies are acting legally and meeting their Ofwat water quality targets. Matt Staniek
3. Give the EA and Ofwat the resources, power and leadership to do their job. Nick Measham
4. Seek out highway outfalls that are causing toxic pollution on your catchment and bring pressure to bear on the relevant highways authority to deliver effective treatment. Jo Bradley
5. Citizen Designated Bathing Status whilst Defra drags it's heels. Becky
6. Enforce water company statutory duty to treat all components of waste water (including microplastics). Jamie Woodward
7. Stop unflushables going down the loo (mostly wet wipes). Adam Ashman



The Results



What Next – Noise, Lobbying and Getting Attention

- Water (special measures) Bill Amendments
- Environment Select Committee
- Defra Questions
- Briefings in Westminster
- March for Clean Water



The Answers need to address:



THE LAW: Clarifying guidelines.



DESIGN: Technically what is needed in a combined sewage system.



MONITORING & ENFORCEMENT: How do we know if we have clean water for rivers, lakes and seas. What counts as clean?



COST: What is the actual cost and to who.



SYSTEM: How do we get a secure, safe, sustainable water system - what ownership and financing model do we need, and how does the public have a real stake and say.

Thank you



Climate Action Ilkley

